Food and Agriculture Organization of the United Nations

Forest communities in the face of COVID-19 crisis

The role of social organisation in response, recovery and building back better

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Forest communities in the face of COVID-19 crisis

The role of social organisation in response, recovery and building back better

By
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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS
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[1] See www.fao.org/forest-farm-facility/en

Acronyms

AFIN	National Indigenous Forestry Association of Bolivia (Asociación Forestal Indígena Nacional)
CFUGs	Community forest user groups
CIDOB	Confederation of Indigenous Peoples of Bolivia (Confederación de Pueblos Indígenas de Bolivia)
FAO	Food and Agriculture Organization of the United Nations
FDCs	Forest-dependent communities
FECOFUN	Federation of Community Forestry Users of Nepal
FFF	Forest and Farm Facility
FIFATA	Association for Progress among Peasant Farmers (Fikambanana Fampivoarana ny Tantsaha), Madagascar
FMNR	Farmer-managed natural regeneration
GhaFFaP	Ghana Federation of Forest and Farm Producers
HHs	Households
IIED	International Institute for Environment and Development
NTFPs	Non-timber forest products
PPE	Personal protective equipment
RECOFTC	The Center for People and Forests
TCOs	Indigenous community lands (*tierras comunitarias de origen*), Bolivia (Plurinational State of)
UNORCAC	Union of Peasant and Indigenous Organisations of Cotacachi (Unión de Organizaciones Campesinas Indígenas de Cotacachi), Equador
VSLAs	Village savings and loans associations

Summary

COVID-19 crisis continues to have severe impacts on the societies, economies and environments of **forest communities, creating implications from individual to global scales.** This working paper draws on data from reported COVID-19 impacts and responses, lessons from previous crises (eg HIV/AIDs, Ebola, 2008 financial crisis and other national-level disasters) and five primary case studies from forest and farm producer organisations. It provides an understanding of the current situation and makes recommendations for the future. A temporal resilience framework is used to structure the empirical evidence on how forest communities can respond, recover and build back better from COVID-19 crisis. This evidence is used to generate recommendations for how actors including producer organisations, governments and development institutions, can facilitate these efforts.

The impacts of the COVID-19 pandemic on forest communities have been shaped by pre-existing social, economic and environmental vulnerabilities. Owing to the diverse nature of forest communities, which include among others Indigenous Peoples living on large territories, smallholder farmers living in mosaic landscapes and timber processors living in peri-urban areas, existing vulnerabilities have mediated the impacts of COVID-19 crisis in highly variable ways. Additionally, differences in vulnerability based on gender, age, informality or ethnicity have also shaped impacts and responses to COVID-19, with already-vulnerable groups often most impacted and least able to respond.

Despite existing vulnerabilities, forest communities have also shown a great deal of resilience. Resilient communities and individuals are those capable of mobilising social, economic, human, physical and natural capitals to absorb stress, incrementally adapt and transform in the face of COVID-19 crisis. In many instances documented in this working paper, social organisation and collective action achieved through locally accountable organisations has been key for resilience to COVID-19 crisis.

SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACTS

While forest communities have shown resilience to COVID-19 crisis, there have been significant impacts across social, economic and environmental domains.

Social impacts

Socially, COVID-19 crisis has had a plethora of direct and indirect impacts in forest communities. Health has been impacted, both directly (Indigenous Peoples have often experienced higher fatality rates) and indirectly (COVID-19 measures that have reduced access to often already-sparse rural health services such as reproductive healthcare). Mental health issues have also been prominent. They are a product of a lack of information on

the status and spread of COVID-19 and an acute awareness of the lack of capacity to deal with an outbreak. The pandemic has also exacerbated food security challenges in forest communities, creating additional health concerns. Longer-term social impacts of COVID-19 crisis are likely to result from the disruption in education of youth, who, due to their often-remote locations, were unable to access online alternatives to in-person schooling. Additional long-term effects on forest communities will result from cultural impacts, such as the loss of prominent elders who are stewards of traditional knowledge and practices.

Economic impacts

Economically, forest livelihoods have been severely disrupted by COVID-19 crisis. Agricultural production has been impacted by reduced access to inputs (labour, seeds, agrichemicals and knowledge). Any income smallholders were able to derive from production during the pandemic was reduced by COVID-19-driven difficulties in accessing local, national and international markets, which also experienced increased price volatility. In addition to reduced agricultural income, key off-farm income sources such as informal employment, tourism and remittances were also significantly disrupted.

Environmental impacts

Environmentally, COVID-19 crisis increased a variety of pressures on forest resources. Individuals unable to access markets and urban–rural migrants dealing with COVID-19-related job losses increased their use of forest resources for food and income, which have been limited by the pandemic. Additionally, global rolling back of social and environmental safeguards has increased the ability of large extractive industries to exploit forest resources. At the same time, where these trends have been observed they are part of an existing political environment. Even if the pandemic provided a distraction to speed up such behaviours, the global impact of COVID-19 pandemic on deforestation remains largely unclear.

How forest communities have mobilised

Forest communities have not been passive in the face of these significant impacts. They have mobilised both through locally accountable organisations and in partnership with other external actors to respond. Key responses have included the use of informal and formal social protection programmes – which have typically been more effective when locally led – and community advocacy and activism to lobby for better access to information and support during the pandemic. Both activities have relied on collecting and disseminating disaggregated data, which is often more accessible to local organisations than the state. Many of the responses to COVID-19 crisis reported here draw heavily on traditional values of solidarity and reciprocity. These have been a principal motivation for forest communities in COVID-19 response.

- Social responses have included organising to tackle **food security** challenges through increased harvesting of wild foods, the provision of food aid by locally accountable organisations and the purchasing and distribution of surplus food by the state.
- Similarly, **healthcare** responses have involved efforts by forest community and state actors to promote access to services, which have typically been complimented by more informal responses such as the use of traditional medicine.
- Economic responses have centred around the **reorganisation of supply chains and markets**. This has been particularly prominent at the local level through collective action in producer organisations.
- Both state and producer organisation actors have sought to mitigate economic losses by providing **alternative access to markets** as well as using social protection measures to create **alternative sources of income** through direct cash transfers, public employment schemes and local savings institutions such as village savings and loans associations.

LOOKING AHEAD: BUILDING BACK BETTER

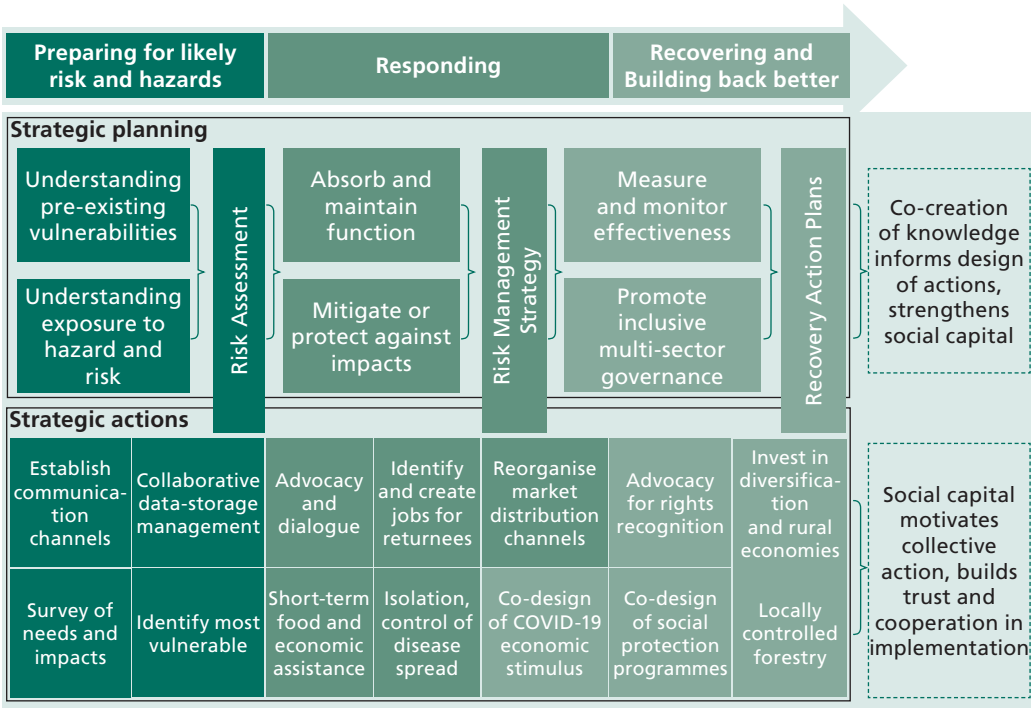
While such response efforts continue, in several locations forest communities are beginning to look at medium and long-term options for recovery and building back better. Reflecting on past crises and building on the initial COVID-19 responses found in the case studies and lessons from producer organisations, this working paper identifies seven key pathways (Box 1) and 14 strategic actions for forest communities to recover and build back better from COVID-19 crisis (outlined in Figure 1).

Box 1
Seven key pathways to building back better

1. Strengthen representative organisations of forest communities.
2. Involve locally accountable organisations in the design of recovery efforts.
3. Diversify production systems to build resilience at multiple levels.
4. Scale up and formalise community-based social protection initiatives.
5. Prepare for and respond to shocks with better data.
6. Support broader rural economic transformations.
7. Support local leadership in forest landscape restoration and protection.

To begin progress towards each of these key pathways, we present recommendations for a range of stakeholders who will be crucial to resilience building in forest communities. These are summarised in a framework to give strategic direction for how organisations of Indigenous Peoples and forest and farm producers can be better prepared for, recover from and be more resilient to future to ongoing and future pandemics.

Figure 1 Strategic direction for strengthening preparedness and resilience to future COVID-19 shocks


Preparing for likely risk and hazards
Responding
Recovering and Building back better
Strategic planning
Understanding pre-existing vulnerabilities
Understanding exposure to hazard and risk
Risk Assessment
Absorb and maintain function
Mitigate or protect against impacts
Risk Management Strategy
Measure and monitor effectiveness
Promote inclusive multi-sector governance
Recovery Action Plans
Co-creation of knowledge informs design of actions, strengthens social capital
Strategic actions
Establish communica-tion channels
Collaborative data-storage management
Advocacy and dialogue
Identify and create jobs for returnees
Reorganise market distribution channels
Advocacy for rights recognition
Invest in diversifica-tion and rural economies
Survey of needs and impacts
Identify most vulnerable
Short-term food and economic assistance
Isolation, control of disease spread
Co-design of COVID-19 economic stimulus
Co-design of social protection programmes
Locally controlled forestry
Social capital motivates collective action, builds trust and cooperation in implementation

The preparatory actions in this framework build on well-established practices of risk assessment, risk management and recovery planning that may already be routine within government departments dealing with natural hazards or even post-conflict recovery. More specific strategic actions for mitigating and recovering from the effects of the pandemic can be broadly grouped into three types of recommendations:

- How communication and information management can be shared and supported
- How responses can be developed and supported based on identified needs, and
- How reorganisation of socio-economic systems can be supported to build back better.

We conclude that what has made communities resilient and able to respond to the COVID-19 pandemic has been largely influenced by the social capital embedded within their representative organisations. It is the social relationships, networks and trust that have helped these organisations respond quickly and to be highly flexible and adaptive to the crisis. These underlying foundations clearly helped motivate collective actions and cooperation during response efforts. Therefore, strengthening representative organisations and involving them in the design of recovery and building back efforts

should be a guiding principle in any of the actions identified above. By giving these organisations the space and support they need to act on behalf of their communities and hold external actors to account during times of crisis, building back better is both possible and within reach.

1. The global impact of COVID-19 crisis on forest communities

COVID-19 pandemic has exacerbated existing vulnerabilities and created new challenges for local communities living in proximity to and depending on forests. The rapid onset of the pandemic, coupled with the limited access to supporting services in these often-remote areas, has brought a new sense of vulnerability. Despite these challenges, various organisations of Indigenous Peoples and forest and farm producers have used their social capital and capacity for collective action to respond to and alleviate the negative impacts of the pandemic on their communities.

Understanding the successes and challenges of these communities and organisations in mitigating the negative impacts of the pandemic has implications that stretch far beyond their own localities. Globally, smallholder production systems, many of which are located in forest landscapes, are the main source of food for more than 70 percent of the world's people, underpinning global food security (ETC Group, 2017). Additionally, organisations of Indigenous and smallholder forest and farm producers such as cooperatives provide crucial employment in remote rural areas. Their collective annual production of crops, fuelwood, charcoal, timber and non-timber forest products (NTFP) are thought to generate a gross annual value of between USD 869 billion and USD 1.29 trillion (Verdone, 2018). Many of these organisations also play a critical role in achieving climate change mitigation and adaptation goals through their management of forest areas. In addition, Indigenous Peoples' territories protect an estimated 80 percent of the world's remaining biodiversity (Inspection Panel, 2016; Tauli-Corpuz, 2019).

The COVID-19 pandemic jeopardises these globally significant contributions. This paper seeks to document key vulnerabilities and impacts seen during the pandemic. It highlights response measures and suggests how social organisation can be key to recovery and strategies to build back better. To do this, we have assessed more than 177 sources of literature, 141 of which (80 percent) were published in 2020 and 2021 alone. In addition, primary data has been acquired in partnership with five organisations of Indigenous Peoples and forest and farm producers (see case studies, Section 4):

- The Ghana Federation of Forest and Farm Producers (GhaFFaP)
- The Union of Peasant and Indigenous Organisations of Cotacachi (UNORCAC – Unión de Organizaciones Campesinas Indígenas de Cotacachi), Ecuador
- The Federation of Community Forestry Users of Nepal (FECOFUN)
- The National Indigenous Forestry Association of Bolivia (AFIN – Asociación Forestal Indígena Nacional), and

- The Association for Progress among Peasant Farmers (FIFATA – Fikambanana Fampivoarana ny Tantsaha), Madagascar.

It must be noted that this working paper and the data that informs it have been published at a time when the COVID-19 pandemic remains an ongoing and dynamic global challenge, with persistent uncertainty on long-term outcomes. We have sought to present the most up-to-date available data. But it is important to recognise the dynamic nature of the pandemic. What was relevant in April or May 2020 – including the predictions made during these early months – might no longer apply or have been adjusted downwards.[2] However, predictions may very well be revised upwards again as many countries are experiencing second and third more-intensive waves of infection. Where possible, we have tried to capture the dynamism of the situation throughout the paper. With this caveat in mind, there is still sufficient material available to draw robust initial observations and recommendations. As the COVID-19 pandemic situation remains ongoing, where appropriate, we complement COVID-19 crisis examples with experiences and lessons from past crises such as the HIV/AIDs epidemics, the West African Ebola outbreak, the 2008 financial crisis and various other national and international shocks and stressors.

1.1 STRUCTURE OF THE REPORT

Our analysis is structured around a temporal resilience framework (adapted from Béné *et al.* 2012; Macqueen, 2021; and Wilson *et al.* 2019). This framework helps to highlight how social organisation can help forest communities to achieve resilience in the short, medium and long-term by being able to:

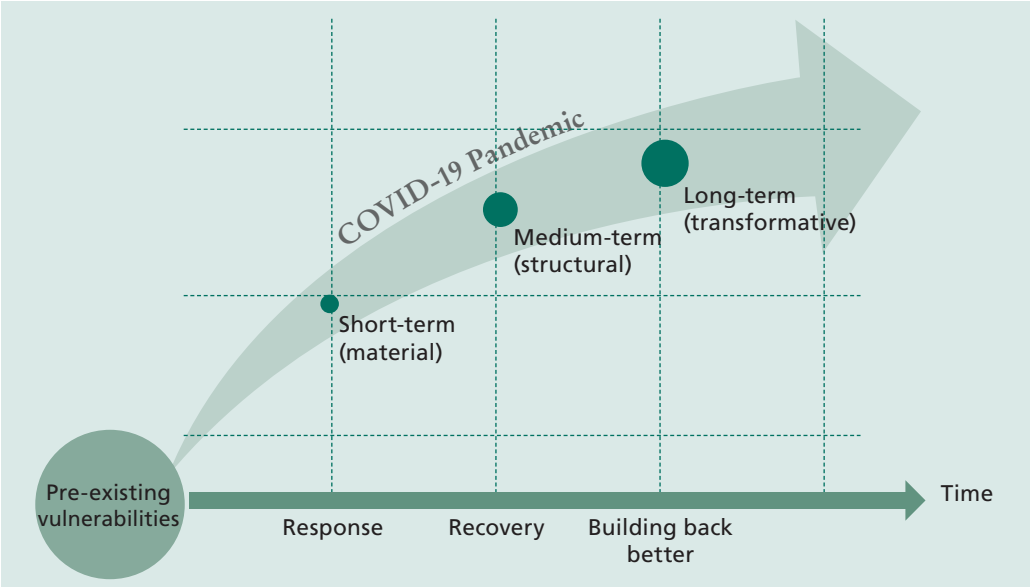
- **Respond:** Absorb stresses and maintain function in the face of COVID-19 crisis and concurrent stressors in the short-term.
- **Recover:** Incrementally adapt and evolve into a more desirable state of being that improves the sustainability of the system in the medium term.
- **Build back better:** Promote reorganisation that pursues long-term prosperity capable of transforming existing inequalities and better prepare for future stressors.

Importantly, this framework highlights crucial differences between short-term (often material) responses which address critical needs at a time of crisis and the medium and long-term (often more structural and transformational) actions that are needed to reduce vulnerabilities and improve resilience to shocks such as COVID-19 pandemic (Figure 2). Within this context, pre-existing vulnerabilities at both the collective and

[2] For example, initial estimates that COVID-19 crisis may reduce global remittances to low- and middle-income countries by 20 percent in 2020 (Ratha *et al.* 2020) failed to materialise, with actual figures suggesting only a 1.6 percent decline (Ratha *et al.* 2020, 2021). At the same time, the importance of remittances is highly varied from country to country. For example, members of CFUGs in countries like Nepal are among those more affected by such impacts whereas in other countries where international migration is less prevalent, it is less important.

the individual level are taken into consideration as they strongly influence outcomes. For this reason, we define 'vulnerability to COVID-19 pandemic' according to the probability of exposure, the degree to which populations would be impacted by an outbreak and their ability to recover (Moseley and Battersby, 2020).

Figure 2 Capturing the evolution and temporal nature of COVID-19 impacts and responses



- In Section 2, we explore who and what we mean by forest communities and their representative organisations and why these are important during crises. Section 3 provides a brief overview of the pre-existing collective and individual vulnerabilities facing forest communities but also how they show resilience.
- The case studies in Section 4 go deeper into the experiences of the five partner organisations. Here, we seek to bring out the lived experiences of COVID-19's multi-sectoral challenges and give voice to grassroots organisations, highlighting their challenges, achievements and hopes and plans for the future.
- Section 5 documents the COVID-19 impacts seen across forest communities, while Section 6 brings together findings on short-term responses to COVID-19 crisis from the broader literature review and case studies.
- In Section 7, we use our findings to highlight seven key pathways for medium-to-long-term recovery and building back better efforts. Finally, in Section 8 we conclude with a set of recommendations for how policymakers, national governments and other non-governmental actors active in COVID-19 crisis response (such as

NGOs and development agencies) can work with organisations representing forest communities to improve their resilience to current and future shocks.

Just as this report heavily draws on lessons from previous crises, it is likely that the evidence and recommendations presented here will be of enduring importance. Lessons learnt from COVID-19 pandemic will be central to dealing with further pandemics that are expected to emerge as human infringements on forested areas continue (Bloomfield *et al.* 2020; di Marco *et al.* 2020). Equally, the findings are highly relevant to a broader diversity of shocks and crises facing forest communities, most notably the ongoing and catastrophic effects of the climate crisis.

2. Who are forest communities?

People interact with forests in highly heterogeneous ways. A huge diversity of peoples, cultures, knowledge systems and lifestyles are caught within the terms 'forest dependent', 'forest proximate' or simply 'forest communities'. These communities can be found in high-income or low-income countries, in rural or urban settings. They can live sedentary or nomadic lifestyles and belong to various types of communities and tribes that identify as Indigenous or non-Indigenous. Unwrapping the myriad of complex and often-overlapping identities and their uses of and dependencies on forest landscapes has proven difficult for forest livelihoods experts and statistics departments for decades.

Most recently, Newton *et al.* (2020) combined forest-cover data and human population density data to map the spatial relationship between people and forests. They found that globally, 1.6 billion people live within 5km of a forest. Of those, more than two thirds live in tropical countries. These 'forest-proximate people' are likely to be linked to, but not necessarily dependent on, nearby forests to meet their subsistence and income needs.

Other good attempts have been made to highlight not just the spatial relationship between forests and people, but the global nature and scale of forest livelihoods contributions (Angelsen *et al.* 2014; Mayers *et al.* 2016; Verdone, 2018). It is estimated that 2.4 billion people globally depend on fuelwood and charcoal for cooking (FAO 2014). Among households living in or near forests, 21 percent of incomes are derived from forest resources (Angelsen *et al.* 2014) while 1.5 billion people globally use or trade non-timber forest products (NTFPs) (Shanley *et al.* 2016). Around 54 million people work in formal or informal employment in the forest sector, although this figure is likely to be a significant under-estimate due to the invisibility of informal NTFP employment in current statistics (FAO, 2014).

Assessments of 'forest dependence' and 'forest proximity' can quantify human-forest interactions and provide possible groupings for the types of peoples we are focusing on. But where possible, we refrain from using these terms. The diversity of people and livelihoods captured in this paper and the plurality of definitions for 'communities', 'forests' and 'dependence' can make the use of such terms of limited analytical utility (Newton *et al.* 2016). Rather, where possible, we refer to the particular nature of the individuals, groups, communities or organisations specific to the case. When referring more broadly to groupings, we simply use the term 'forest communities'. Our aim is not to present a monolithic picture of a rigidly defined group of people. Instead, we offer insights into the diverse impacts of and responses to COVID-19 crisis experienced by an equally diverse group of people. We broadly define this group of communities and peoples as smallholder families, Indigenous Peoples and local communities who have

strong relationships with forests and farms in forested landscapes[3] and who are directly reliant on their diverse products and ecosystem services for their material, social and cultural well-being.

In addition to variations between these groups, there is also variation within them. They are not homogenous entities and should not be treated as such. Individuals with different intersectional identities have different livelihoods and lived experiences and will be impacted by and recover from COVID-19 crisis differently. These differences are shaped by social, economic, environmental and political factors and histories, which must be recognised and rendered visible. From a policy perspective, it is critical that inter- and intra-community differences are understood and incorporated into COVID-19 response and recovery.

For four key reasons, this working paper primarily focuses on communities in the global South. Firstly, most forest-proximate people are located there (Newton *et al.* 2020). Secondly, they generally experience heightened vulnerability to shocks (Gentle *et al.* 2020). Thirdly, COVID-19 impacts are likely to persist in these countries due to global vaccine inequalities (Aryeetey *et al.* 2021; Oxfam, 2020). Finally, many rural communities in the global South are also on the frontline of concurrent global crises such as climate change, poverty and biodiversity loss (BOND, 2020).

2.1 FOREST COMMUNITY RESILIENCE: THE ROLE OF SOCIAL ORGANISATION

In this paper, we pay particular attention to organisations of Indigenous Peoples and forest and farm producers. This is due to the crucial role their social capital and capacity for collective action have played during the COVID-19 pandemic (see Box 2 and Figure 4). Many of these organisations are originally deeply rooted in kinship relations, democratic and communal decision-making and shared socio-cultural norms that provide the social foundation and trust necessary for collective action. These organisations can be generally defined as **people-centred forest and farm-based organisations** that are owned, controlled and run by and for their members to realise their common economic, social, environmental and cultural needs and aspirations (International Cooperative Alliance, 2020).

Prior to COVID-19 pandemic, many of these organisations already provided services to their members. They provide resilience to risk and shocks and fill gaps in public service provision (see Bolin and Macqueen, 2019; Tirivayi *et al.* 2018). For example, by creating employment opportunities, these organisations provide the economic springboard needed to help people respond to shocks and reduce exposure to risk (Bolin, 2020; Macqueen *et al.* 2020). Additionally, social organisation is frequently used by these organisations to pool members' savings to provide social and accessible finance through village savings and loans associations (VSLAs). These provide a financial safety net during times of crisis (Macqueen *et al.* 2018a).

[3] Drawing on the FFF definition of 'forest and farm producers' who rely on both forest and farm production to meet subsistence and income needs (FAO, 2018).

Perhaps most importantly, organising allows members to overcome power imbalances and distribution and access challenges in the market. Collective action makes activities such as product aggregation and value addition both possible and affordable (Macqueen *et al.* 2015). And in times of high uncertainty and limited access to new knowledge, local organisations support members to develop technical skills to improve food security, generate climate resilience and improve environmental conditions (Macqueen, 2021). All these activities and services are examples of how organisations of Indigenous Peoples and forest and farm producers contribute to building a set of critical capitals that help reduce vulnerability and increase resilience to shocks (Mayunga, 2007; see also Figure 3). These 'resilience capitals' in various forms of more or less tangible assets, capabilities, and shared values are all needed to develop a community economy. They are also an example of how these organisations actively pursue multi-faceted notions of prosperity embodied by their members (Macqueen *et al.* 2020).

Throughout the COVID-19 pandemic, these organisations have been critical in immediate responses. Their ability to quickly and flexibly mobilise their trusted social capital to assess and respond to the needs of their members and local communities has often outperformed slower, more bureaucratic state institutions (Gentle *et al.* 2020; Paganini *et al.* 2020; Pimentel and Ormaza, 2020). This value of local organisations and institutions in responding to COVID-19 crisis has been highlighted by Gentle *et al.* (2020: 1):

> *Being an autonomous and well-recognised community-based institution with trusted social capital (trust, connectedness, norms, and networks) for collective action together with its scope and mandate to democratically manage and mobilise its physical, financial, natural and human assets, CFUGs [community forest user groups] have become the most effective institutions to provide immediate support to disaster affected communities. While most other agencies including non-governmental organisations spend a lot of time exploring avenues for immediate response to the disasters, CFUGs have immediate access and infrastructure to support millions of people in rural areas.*

The work of organisations like CFUGs was critical following the 2015 Nepal Earthquake (Gentle *et al.* 2020). CFUGs were among the first to mobilise volunteers and provide 'buildings and land for shelter (physical asset) to affected communities, distributed forest products (natural asset) for reconstruction works and for immediate source of energy and livestock feed, mobilized their savings (financial asset) for relief and recovery, and local knowledge and experience (human asset) in identifying local needs [and] targeting the most vulnerable' (Gentle *et al.* 2020: 4).

Additional examples can be drawn from the 2014 Ebola virus disease outbreak in Sierra Leone. Community institutions (specifically chiefdoms) mobilised their local authority and legitimacy to create and enforce movement restrictions and safe, culturally appropriate burial practices which led to localised reductions in infection rates (Richards, 2016). The value of these organisations during health crises is likely linked to experience in dealing with other types of chronic diseases that are endemic to the tropics and

Members of Aadhar Ekata (a women's group enterprise) and members of FECOFUN during an exposure visit learn value addition and how to market local products
© Aadhar Ekata

that tend to affect communities living in and around forest areas (such as malaria or Chagas disease). Additionally, traditional forms of cooperative practices and solidarity to ensure community well-being are often deeply rooted in the local cultures of forest communities. For example, many cultures in the Andes and the Amazon regions have their own mutual aid and collective work systems such as the *ayni* and *minka* which involve collective support to build community assets such as schools, roads or homes or family assistance for important life events such as marriages and death (Calvo *et al*. 2017). Often these systems co-exist alongside newer forms of socio-economic and business cooperation, such as savings and loans associations and producer organisations, who themselves are often established to respond to a common challenge.

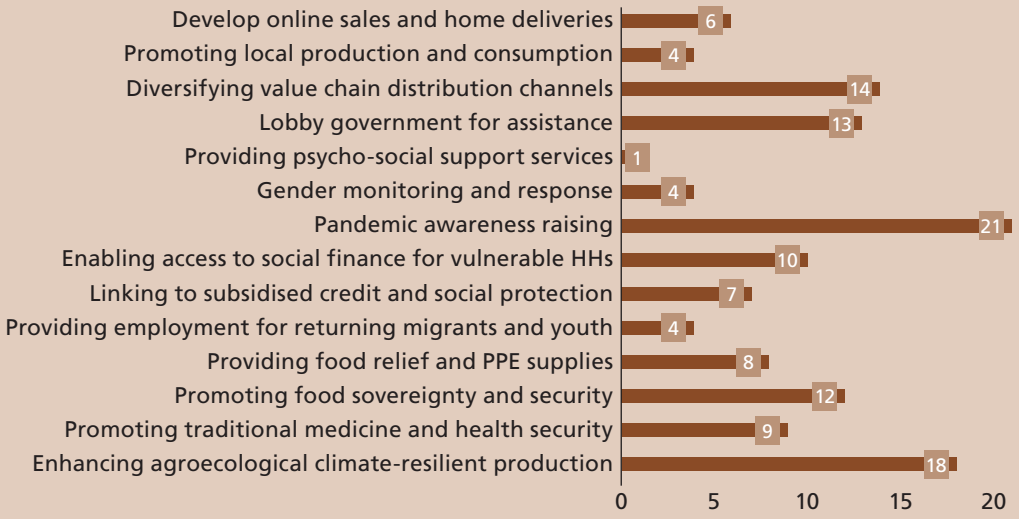
Figure 4 and Box 2 provide an overview of how forest and farm producer organisations are critical to responding to, recovering from and building back better from COVID-19 crisis. These benefits are widely recognised. Members view such organisations as a strategic pathway to access resources and therefore commonly form or join groups to pursue social, economic, environmental and political goals (Johnson, 2021; Macqueen and DeMarsh, 2016). External actors such as development agencies and governments also recognise these benefits and often look to channel support through locally accountable organisations in times of crisis (FAO, 2020a; FAO Regional Office for Africa, 2020). The capacity of these organisations to engage in dialogue with government actors makes them essential players in ensuring that the needs of more vulnerable communities in remote forest areas are recognised in the planning and implementation of recovery and building back better.

Figure 3 Types of resilience capital used by forest community organisations to respond, recover and build back better

Resilience capitals	Shock: COVID-19	Response	Recovery	Building back better
Social: trust, norms, networks	Shock: COVID-19	Individuals and organisations use trust and kinship networks to leverage access to key resources in response to COVID-19 shocks	Social capital within communities is used to mobilise people and resources to facilitate collective recovery	Governance systems are improved to develop social cohesion and trust between FDCs and external actors
Economic: income, savings, investment	Shock: COVID-19	Utilisation of local savings institutions helps to mitigate initial economic shocks from COVID-19	Collective action supports (re)organisation in value chains, innovation and access to new markets	Increased investment in local businesses and markets reduces vulnerability to shocks
Human: education, health, skills, knowledge	Shock: COVID-19	Increased utilisation of traditional knowledges and practices in response to COVID-19 impacts	Traditional knowledge systems and solidarity are promoted towards vulnerable groups (food aid, skill sharing etc)	Contributes to a patchwork of locally informed and designed social protection measure for future crisis response
Physical: housing, public infrastructure and services	Shock: COVID-19	Community-based organisational offices used to provide quarantine areas for returning migrants	Organising to install new market infrastructures such as storage facilities enables aggregation and new distribution channels	Improved investment in rural infrastructure and services improves the ability of FDCs to respond to future crises
Natural: land, water, ecosystems, natural resources	Shock: COVID-19	Increased reliance on natural resources as COVID-19 compromises other sources (eg markets)	Sustainable management of natural resources and natural regeneration supported through trainings and technical assistance	Protection and regeneration of forest areas improved through collective efforts and rights to forest resources

Box 2
COVID-19 response strategies of forest and farm producer organisations

Figure 4 COVID-19 response strategies reportedly used by 30 FFPOs (March to December 2020)



Throughout 2020, the Forest and Farm Facility (FFF) undertook ongoing monitoring with partner organisations representing forest and farm producer organisers (FFPOS) in Africa, Asia and Latin America. Their findings suggest that while most reported impacts have been economic, FFPO response strategies have been much more diverse. At least 14 different strategies were noted (Figure 4). Although much of the recorded impacts were economic, nearly half of the mitigation strategies were socially oriented and a third were environmental. This demonstrates an immense resourcefulness and resilience of these organisations. It also shows that social capital and capacity for collective action, as embodied in these organisations, has helped to mitigate, although not eliminate, the negative impacts of the pandemic.

2.2 LOCALLY REPRESENTATIVE ORGANISATIONS ARE KEY TO BUILDING BACK BETTER

> *Everything we do during and after this crisis [COVID-19] must be with a strong focus on building more equal, inclusive and sustainable economies and societies that are more resilient in the face of pandemics, climate change and the many other global challenges we face.*
>
> António Guterres, Secretary-General of the United Nations (UN DESA, 2020f).

Just like previous crises, COVID-19 crisis has highlighted the **persistent injustices and inequalities** created and reproduced by the hegemonic practices that shape global economies, societies and environments (Leach *et al.* 2021). But this model of 'development' has rapidly come undone during the pandemic. COVID-19 crisis has brought these concerns to the front of global discussions on development. This presents a chance for a global paradigm shift, one that has widely been termed as the need to 'build back better'.

Building back better means different things to different people. As such, several policy futures are possible (Sandbrook *et al.* 2020). The term was first used in the context of recovery and physical reconstruction following the 2004 Asian Tsunami. The emphasis was on making preventive investments that could help reduce exposure to and impacts of future disasters (OECD, 2020). But the context of COVID-19 crisis is different. Now, the focus is global and the economic crisis is severe. Consequently, there is an unprecedented opportunity to 'reset' economies at a global level.

Building back better must also continually revisit questions of transformation 'from where, by whom and in what ways' (Blythe *et al.* 2018). Too often, these questions have been overlooked when designing development policies and setting priorities. This has led to rigid and top-down approaches that exclude the voices of the diverse individuals and communities whom they affect (Leach *et al.* 2021). COVID-19 crisis offers an opportunity to reverse this trend by including insights from a broader set of actors. Box 3 provides reflections on the concepts of 'building back better' and 'green recovery' from four forest and farm organisation leaders in Bolivia (Plurinational State of), Nepal and Ghana.

Box 3
FFPO leaders reflect on the meaning of 'green recovery' and 'building back better'

For us, 'green recovery' means to return to the essence of our communities' life. It implies the articulation of forest-management activities with the food security systems of our communities. It also includes bringing ecological family farming in the frontline as a vital strategy to secure communities' livelihoods and prioritising food security of families.
Rolando Rubén Vargas Nina, Asociación Forestal Indígena Nacional (AFIN), Bolivia (Plurinational State of)

'Green recovery' includes raising the value of healthy consumption and the recovery of our ancestral knowledge, which, combined with current techniques, can support the establishment of agroecological production for crop diversification and food sovereignty.
Marco Calle, Asociación de Organizaciones de Productores Ecológicos de Bolivia (AOPEB), Bolivia (Plurinational State of)

'Building back better' means being resilient in the face of adversity by using lessons from the past and putting new and improved measures/strategies in place, to ensure that activities are carried out more efficiently. This also means supporting farmers through knowledge acquisition in alternative livelihood-income generation. This is achievable through judicious resource allocation commitment and usage, continuous education among other things and garnering governmental /institutional and other support with policy changes.
Joyce Poku-Marboah, Kookoo Pa Farmers Association (KKFA), Ghana

'Building back better' means developing sufficient resources and enabling farmers towards restoration and recovery from the pandemic and capacitate them to bounce back to their normal lives.
Jog Raj Giri, Association of Family Forest Owners, Nepal (AFFON), Nepal

Source: Forest and Farm Facility (2020a)

Delivering transformational change is a huge challenge. However, transformation is most likely to happen at 'times of crisis, when enough stakeholders agree that the current system is dysfunctional' (Olsson *et al.* 2010: 280). COVID-19 crisis has highlighted the dysfunctionality of many current systems. Widespread groups have called for a reorientation, moving away from a focus on individuality and economic growth towards goals such as diversity, resilience, care, equity, inclusion, health and interconnectedness (Büscher *et al.* 2021; Leach *et al.* 2021).

Several of these key attributes are often present in organisations representing forest communities' knowledge systems and practices. For example, in Latin America, diverse visions of *buen vivir* ('good life' or 'living well') are pursued across Indigenous Peoples' organisations. These envision transformative alternatives to development centred on common life and a harmony between people and nature (Acosta, 2012; Deneulin, 2012). Additionally, in Africa, the pluralistic philosophy of *ubuntu* ('I am because we are') refers to a oneness and holistic connectivity between all life and has been used as a motivation for conservation (Mawere, 2014). *Ubuntu* can also provide a moral framework for decision-making (including during public health emergencies) based on interdependency and sociality that challenges currently hegemonic ideas of individualism (see Samabala *et al.* 2020a,b). Furthermore, various forms of community forest or Indigenous Peoples' territorial organisations often have knowledge on how to successfully engage in collective management of common resources (Ostrom, 1990). Often, their forest-based businesses are based on democratic decision-making that leads them to pursue broad definitions of prosperity, rather than being narrowly focused on economic gains (Macqueen *et al.* 2020).

The rest of the world can learn so much from these knowledges and practices (Curtice and Choo, 2020). They can contribute to the re-organisation required to develop alternative societies, economies and environments required for post-COVID-19 transformations (Leach *et al.* 2021). Consequently, organisations representing these communities are indispensable partners and visionaries in building a post-COVID future.

Reinvestment in heavy transportation for forest resources from the community forest-management area in Santa Mónica © AFIN

3. Vulnerabilities and resilience to COVID-19 crisis

3.1 COLLECTIVE VULNERABILITIES TO COVID-19 CRISIS

The relative spatial isolation of many forest communities may have delayed the arrival of COVID-19 pandemic. But when exposure does occur, a lack of access to key infrastructure (roads, power, irrigation and sanitation), services (healthcare and communication) and policy representation increases impacts (Béné, 2020; Dutta and Fischer. 2021; FAO, 2020c, e; Ogunkola *et al.* 2020; Menton *et al.* 2021). Existing social, economic and environmental inequalities increase vulnerability to COVID-19 crisis.

At a social level, forest communities – and particularly Indigenous Peoples – have historically been marginalised have often. As many forest communities continue to struggle for policy representation and visibility, their needs and realities are often missing from crisis planning and response (Curtice and Choo, 2020), hindering ability to recover. Poor policy representation also underpins struggles to establish and defend rights to forest lands (FAO, 2020c), which are key social safety nets (UN DESA, 2020a), increasing the severity of impacts.

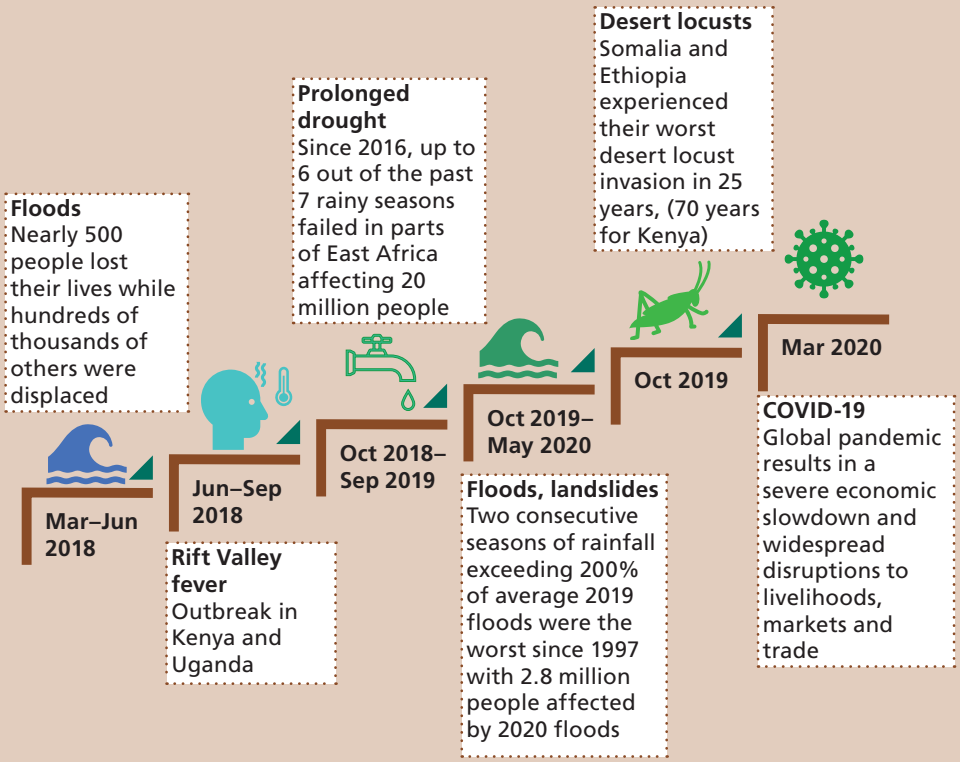
Economically, up to 250 million people living in or near forests are classified as extremely poor (Miller *et al.* 2020). They are highly vulnerable to economic shocks. Additionally, smallholder forest and farm producers are often embedded in international commodity value chains, such as coffee and cocoa, and are highly exposed to price and market fluctuations (Guido *et al.* 2020i; Neilson *et al.* 2018).

Finally, because of where they live, forest communities have a higher exposure to shocks and crises that originate in or severely affect their environment. They are on the frontlines of several concurrent crises, such as climate change, forest fires, flooding, drought and locust plagues (Boughton *et al.* 2021; FAO, 2020e; ILO, 2020). The presence of existing crises increases the likely severity of COVID-19 impacts, thus increasing vulnerability (Box 4).

Box 4
Concurrent crises in smallholder forest and farm production

For smallholder farmers in East Africa, many of whom live and farm in a mosaic of forest and farm landscapes, COVID-19 pandemic is the latest in a long line of severe shocks which create and exacerbate social, economic and environmental vulnerabilities in the region (Figure 5).

Figure 5 Timeline of shocks experienced by smallholder farmers in East Africa


Floods
Nearly 500 people lost their lives while hundreds of thousands of others were displaced
Mar–Jun 2018
Jun–Sep 2018
Rift Valley fever
Outbreak in Kenya and Uganda
Prolonged drought
Since 2016, up to 6 out of the past 7 rainy seasons failed in parts of East Africa affecting 20 million people
Oct 2018–Sep 2019
Oct 2019–May 2020
Floods, landslides
Two consecutive seasons of rainfall exceeding 200% of average 2019 floods were the worst since 1997 with 2.8 million people affected by 2020 floods
Desert locusts
Somalia and Ethiopia experienced their worst desert locust invasion in 25 years, (70 years for Kenya)
Oct 2019
Mar 2020
COVID-19
Global pandemic results in a severe economic slowdown and widespread disruptions to livelihoods, markets and trade

Source: adapted from FAO (2020e)

East Africa is not the only place where forest and farm communities are dealing with concurrent crises. In Bolivia (Plurinational State of), the National Indigenous Forestry Association (AFIN) indicated that they face three simultaneous crises. The first is due to the saturation of the local timber market with imported timber from China. In recent years, increased availability of cheap imported timber has led to a dramatic decline in market demand for domestic timber, reducing household income. The loss of income from the forest has reduced the incentive for groups to design and maintain forest-management plans, which are

essential to claim and maintain territorial rights, creating fears of additional encroachment into Indigenous territories. The second crisis was caused by unprecedented forest fires in 2019 and 2020 (with approximately 6 million and 1 million hectares of forest lost, respectively), creating huge environmental destruction, economic losses, and the loss of culturally important sites. Multiple factors contributed to the fires, including a prolonged drought and increased deforestation. However, perhaps a more important factor was the change in government policy in 2019 on the right to clear land for agriculture. According to the new policy, the area of land that could be burnt for clearing was increased from 5 hectares to 20 hectares and this caused the situation to spiral out of control. It was in this context that COVID-19 pandemic arrived in Bolivia (Plurinational State of), exacerbating economic losses and increasing encroachment on Indigenous territories. Each of these crises represents a significant challenge. However, AFIN has to deal with all three at once.

3.2 INDIVIDUAL AND INTERSECTIONAL VULNERABILITIES TO COVID-19 CRISIS

Collective vulnerabilities are not experienced evenly. Individual vulnerabilities and responses to shocks are shaped by overlapping social identities and associated power systems, privilege and marginalisation (Erwin *et al.* 2021). Women and girls, Indigenous Peoples, youths, informal workers, migrant workers and landless individuals have all experienced heightened vulnerability to COVID-19 crisis.

3.2.1 Women and girls

Historically, responses to disease outbreaks often fail to recognise the gendered nature of impacts and the need for gender-sensitive responses. This 'tyranny of the urgent' means structural issues are set aside in favour of more urgent needs (Davies and Bennett, 2016; Smith, 2019). During the 2014–2016 Ebola outbreak, women were most affected by the virus because of their predominant role as caregivers both at home and in the healthcare sector. However, because of their weaker position in decision-making, their needs were largely unmet by responses (Wenham *et al.* 2020).

3.2.2 Indigenous Peoples

Centuries of colonisation and Historically, this has led to disproportionately high negative impacts from past pandemics (Power *et al.* 2020). Indigenous Peoples generally have poor access to and representation in healthcare, social protection and education. This has increased Indigenous Peoples' clinical vulnerability to COVID-19 and limited their possibilities for response (Díaz de León-Martínez *et al.* 2020; Pimentel and Ormaza, 2020; del Pino and Camacho, 2020). Additionally, for many Indigenous groups, the pandemic is taking place in the context of ongoing struggle and resistance. Many still face dispossession of their territories (Farrell *et al.* 2021; O'Callaghan *et al*. 2021).

This undermines their ability to recover as traditional shock responses within Indigenous communities typically rely on access to their territories and associated natural resources (Degawan, 2020).

3.2.3 Youth

Young people face difficulties in accessing natural resources, finance, technology, and knowledge. They are also generally under-represented in decision-making processes. This is likely to limit their ability to recover from COVID-19 crisis (FAO, 2020e; Macqueen and Campbell, 2020; UN DESA, 2020b). Youth are also disproportionately represented in the informal labour market and are more likely to lose employment during COVID-19 pandemic (FAO, 2020f).

3.3 FOREST COMMUNITIES AND RESILIENCE TO COVID-19 CRISIS

While forest communities have been vulnerable to COVID-19 crisis, they have also shown resilience. In many ways their societies, economies and environments have insulated them from – and proven them capable of responding to – COVID-19 impacts in ways not achieved in more 'developed' and affluent contexts. Resilience is highly contextually dependent. Pathways for achieving it vary hugely from community to community and individual to individual. One well-documented way of engendering resilience is through social organisation. Box 4 provides a snapshot example of this from 14 community forest organisations in Asia.

Box 5
Community forest organisations in Asia draw on multiple assets to support resilience

In 2020 and 2021, The Center for People and Forests (RECOFTC) carried out a survey of impacts and responses to COVID-19 crisis on households and communities in community forest areas (RECOFTC, 2021). They interviewed more than 400 individuals and members from 14 community forest-management committees in seven countries in Asia (Cambodia, Indonesia, Lao PDR, Myanmar, Nepal, Thailand and Vietnam). In all countries, they found that people had relied on their community forests, especially NTFPs, to meet households needs for food and cash income during the pandemic. They also found that the community forest committees had played a key role in mitigating the impacts of the pandemic. Of course, the community forest itself provided an important asset and safety net that both individuals and community forest committees were able to draw on to meet subsistence and income needs. However, it was the social organisation developed around this communal asset that provided the many building blocks that helped communities cope during lockdowns. Through their networks and relationships with non-governmental organisations and government agencies, community forest

committees within all seven countries were able to mobilise financial and material support to respond to the effects of the pandemic. This along with the quick establishment of communication channels to share important information about the disease, control measures and national lockdown measures, led to high compliance with public health advice. They were also able to draw on their skills and social cohesion to protect their forest from illegal harvesting and encroachments during the lockdown, despite increased pressures and reduced oversight from law enforcement agencies.

Importantly, the attainment of community forest tenure rights as achieved by the 14 communities in the RECOFTC (2021) study necessitates organisation, whether existing or not, to ensure those rights are upheld and generate benefits to its users. That organisation can be formally through community forest committees as highlighted here or through community-based forest enterprises as will be highlighted in Section 4. In turn, the organisation required often leads to the development of a host of activities and relationships around the sustainable management of the forest. Many of these activities have proven to be crucial during the pandemic.

From a more in-depth perspective, the case studies in Section 4 document the lived experiences of five organisations of forest and farm producers. They highlight how they have been impacted by COVID-19 crisis, how they have responded and how – with the right support – they feel they can build back better.

4. Case studies: Social organisation's experiences and future priorities

4.1 GHAFFAP, GHANA: THE LIVED EXPERIENCES OF MEMBERS DURING COVID-19 COVID-19 PANDEMIC

Mark Kebo Akparibo, Benjamin Sarfo and Jack Covey

GhaFFaP member from Tele-Bere producer association during a zonal-level review session in Yarigabisi Zone © Tele-Bere

4.1.1 Organisational background

The Ghana Federation of Forest and Farm Producers (GhaFFaP) was formed in September 2019. GhaFFaP was founded to realise the vision of improving the standard of living of members [forest and farm producers] through sustainable environmental management and land use practices by contributing to sustainable livelihoods of forest and farm producers through advocacy, capacity building, environmental management, business development and partnerships building.

GhaFFaP is made up of 12 producer organisations. Each has a longer history of working with smallholder communities across Ghana's three ecological zones: the forest zone in the south, the transition zone in the centre, and the savannah zone in the north. Together, these producer organisations represent nearly 1.043 million people: roughly 480,000 women (~46 percent) and 560,000 men (~54 percent). Of these, just over 208,000 (20 percent) are youth forest and farm producers.

GhaFFaP operates through a multi-scalar governance structure. This reflects the

contextually different environments and diverse activities of its member organisations. The structure is designed to ensure that grassroots voices are represented at the top of the federation through the general assembly.

4.1.2 Impacts experienced from COVID-19 crisis

Ghana had its first case of COVID-19 in March 2020. The government response was to quickly impose movement restrictions, especially in Greater Accra and Kumasi, the country's two major urban hubs. Local and regional markets and schools closed shortly after initial measures and, in some areas, lasted for up to four months. The impacts of these restrictions on GhaFFaP members were heightened by several concurrent challenges. These included highly variable rainfall (impeding farming activities and believed to be a product of climate change), severe flooding in the north (which led to the submersion of farmland, loss of livestock and further disruption to transport infrastructure), a lack of access to fair markets and poor representation in policy.

COVID-19 crisis has primarily impacted the food security and value chains of GhaFFaP's smallholder farmer members. These impacts were documented by an extensive survey conducted by GhaFFaP between August and October 2020 with 650 members (374 male, 276 female) spread across 11 producer organisations, six regions, 14 districts and 18 communities. The survey primarily used qualitative methods, including in-depth interviews and focus group discussions to highlight the lived experiences of GhaFFaP members and identify the root cause of challenges.

The survey found that the COVID-19 outbreak harmed smallholder value chains in several ways, including reduced access to inputs, markets and finance and market volatility.

Reduced access to inputs

Smallholder access to agrochemical inputs was affected by the closure of markets and agrochemical storage facilities in urban areas, and the inability of members to travel to purchase inputs during COVID-19 period due to fear and transport restrictions. However, 25 percent of respondents said they were not worried about access to agrochemical inputs because they could not even afford them. Labour was another key input disrupted by challenges relating to the COVID-19 pandemic. The fear of congregating in groups meant smallholders were unable to work through communal labour which is usually essential for production. Finally, GhaFFaP members also reported that they lost access to knowledge during COVID-19 period. Due to fear and transport restrictions, agricultural extension agents did not attend to rural communities, cutting off a key source of specific field-based agricultural knowledge usually relied upon by smallholders to optimise production.

Reduced access to markets

Access to markets was also inhibited by action taken to prevent the spread of the virus. This was especially true for markets reliant on international buyers, such as shea butter. In the savannah ecological zone, shea producers lost 15,230 containers (3kg each) of shea

butter worth approximately 7,000 Ghanaian cedi (USD 1,211). Because of containment and other mitigation measures, borders to Burkina Faso and Togo, over which shea buyers usually travel, were shut. Poor market access during COVID-19 period was not new for farmers in the transition and forest zone. Many already complained of the lack of access to sustainable, fair, high-value and international markets for their produce. However, these challenges were worsened by COVID-19 as domestic and regional markets were also closed. Unable to sell their produce, huge amounts had to be left to COVID-19 crisis rot as members typically had no access to adequate storage facilities.

Market volatility

The markets that remained accessible to members suffered from increased volatility during COVID-19 period. Due to hoarding by growers creating artificial scarcity, the price of usually readily available staple foods such as maize, plantain and cassava increased in the forest and transition zone. Millet and beans experienced price rises in the savannah zone. Agrochemical inputs also increased in price, creating further strain on food production. A lack of standard pricing for these commodities in domestic markets meant that COVID-19 crisis induced market volatility could not be easily controlled.

Access to finance

Less formal modes of accessing finance (such as Village savings and loans associations [VSLAs] or informal commodity traders providing cash advances to farmers) were undermined during COVID-19 crisis. Although they provided some mitigation, cash reserves that would otherwise be used for production were spent on food. Additionally, more formal access to finance such as bank loans or government-run COVID-19 stimulus packages were unattainable to GhaFFaP members. This was due to a lack of collateral, a perception among financial institutions that smallholder farming was too risky (especially during COVID-19 crisis) and overly cumbersome and complex processes required to access government support.

Implications

The COVID-19 impacts on value chains and associated loss of income meant a loss of food security for GhaFFaP members. In the forest, transition and savannah zones 55 percent, 50 percent and 85 percent of respondents respectively said they consumed less food compared to pre-COVID-19 levels. This was due to difficulties in production (lack of access to inputs) and markets (inability to buy). Urban–rural migration and school closures also increased the number of household members requiring food.

Additionally, dietary diversity (a key component of food security) was also reduced. Less red meat, eggs, rice, leafy vegetables and fruits were consumed and were replaced by self-cultivated food such as cassava, plantain, yam and taro in the forest and transition zones and millet, yam, maize and beans in the savannah zone.

Finally, secondary impacts on smallholder value chains and food security are likely to emerge from harmful coping strategies that were used in response to COVID-19 (see the following section). While such strategies provide short-term relief, they often have associated short and long-term social and economic consequences.

4.1.3 Individual responses to COVID-19 crisis

GhaFFaP responses to COVID-19 crisis occurred at multiple scales and have been both individual/private and collective/organisational in nature. Individuals within member communities often engaged with coping strategies to mitigate the impacts of COVID-19 pandemic:

- **Reducing the number of daily meals:** This was a common response, especially amongst women and children to ensure food stocks lasted for longer due to uncertainties in production and marketing caused by COVID-19 crisis.
- **Distress sales of farm or household assets** such as livestock: This created a short-term increase in income to buy food or maintain other household responsibilities. However, the practice is likely to undermine future food insecurity and economic stability.
- **Reducing the amount of land under cultivation** due to uncertainty, disruption in income and poor access to inputs: This may lead to a reduced supply of market products, creating further price volatility and causing household shortages in food and income to persist further into 2021.
- **Maternal buffering:** This was common among respondents, with mothers reducing their food intake to enable their children to eat enough, highlighting the gendered nature of COVID-19's food insecurity impacts.
- **Farmers consuming their own agricultural produce** to mitigate food security challenges: 75 percent of respondents in the forest and transition zones and 89 percent in the savannah zone indicated the food they consumed during COVID-19 period was self-produced.
- **Individuals ate less-preferred foods** such as roasted yam in the forest and transition zones and roasted corn and groundnut in the savannah zone to cope with a shortage in food diversity due to limited market access.
- **Borrowing money to buy food:** This was done by some farmers but can be harmful if money is acquired from predatory lenders at an exorbitant interest rates, resulting in long-term debt.
- **Borrowing food from friends, family, or neighbours** during: This strategy highlights the importance of social cohesion and capital in responding to shocks. Locally accountable organisations such as GhaFFaP can help improve such social capital in communities and thus improve response to shocks.
- **Collecting food from the wild or food gardens:** This strategy highlights the importance of maintaining diverse food gardens and surrounding forest landscapes, something which is encouraged by several GhaFFaP member producer organisations who promote agroecology and forest restoration activities.
- **Travel to search for jobs in urban areas** to overcome COVID-19-related income deficits: This strategy could further add to challenges associated with rural–urban migration, which were (temporarily) reversed during COVID-19 period.

- **Farmers have expressed interest in diversifying activities:** Many farmers have realised they cannot rely solely on their farm enterprise. Members will be supported by their organisations to pursue off-farm alternatives that are less climate dependent (for example beekeeping, mushroom and snail farming, soap making).

4.1.4 Collective responses to COVID-19 crisis

In addition to coping strategies undertaken by individual members, GhaFFaP and its producer organisations have also engaged in collective action responses. At the local and zonal levels, producer organisations mobilised to provide appropriate, accessible and reliable information to communities on how to stay safe during COVID-19 pandemic and adhere to government guidelines. Additionally, local VSLAs, which are commonly administered through producer organisations, were essential (if not totally sufficient) in providing finance to smallholders with reduced income. Several of the GhaFFaP producer organisation members, including the Zuuri Organic Vegetable Farmers Association (ZOVFA), the Peasant Farmers Association (PFAG), the Kassena Nankana Baobab Cooperative Union (KANBAOCU) and Tele-Bere VSL Association (Tele-Bere), worked to address the concurrent flooding challenges in the Savanna zone in the north of Ghana. ZOVFA conducted site visits to the worst affected communities and encouraged media coverage of the floods to raise public awareness and support for those affected. These collective actions by GhaFFaP have highlighted to individuals the value of producer organisation membership during times of crisis.

Following their immediate responses, five months after the first COVID-19 case in Ghana and as soon as restrictions allowed, GhaFFaP staff began to mobilise for the collection of disaggregated data through the survey. This provided key insights into the lived experiences of GhaFFaP members during COVID-19 pandemic and offered an opportunity to gather their thoughts on the impacts of the climate crises and other barriers to their food security and value chain activities. The data will be used by GhaFFaP to strengthen existing engagement with state actors in multiple sectors, including the:

- Ministry of Food and Agriculture (to facilitate timely provision of subsidised agricultural inputs for smallholder producer organisations so that members can expand their farms, make investments and increase food production)
- Ministry of Environment, Science, Technology and Innovation, Ministry of Lands and Natural Resources, and the Ministry of Chieftaincy and Religious Affairs (for policy engagement and dialogue on issues of tree tenure and benefit sharing, which will serve as an alternative source of income for members in the long run)
- Ministry of Food and Agriculture (to encourage cost-effective micro and small- scale irrigation schemes to reduce climate vulnerability and shocks whiles encouraging year-round food production among smallholder farmers), and
- Ministry of Trade and Industry (to build business linkages between government and farmers through state-owned marketing platforms and the private sector).

In this regard, GhaFFaP is currently engaging in its second national dialogue series. This aims to promote national-level stakeholder engagement to build the required synergies in three key areas (policy, access to finance and access to markets). In light of COVID-19 pandemic impacts, this second policy dialogue will particularly focus on the need to devise innovative strategies with key stakeholders towards achieving a green recovery.

4.1.4 Priorities for recovery and building back better

The pathway to recovery and building back better requires several social, economic and environmental adjustments by multi-sectoral actors and policymakers. Based on its vast experience working with smallholders in Ghana and extensive COVID-19 crisis response work, GhaFFaP has outlined the following recommendations:

- GhaFFaP calls for the government to partner with GhaFFaP and other producer organisations to provide a COVID-19 stimulus package aimed at improving farmer production and marketing capacities.
- Poverty alleviation policies and programmes run by government, donor agencies, NGOs and other developmental partners should work through GhaFFaP to ensure support is targeted at vulnerable households and is not captured by political elites and undeserving beneficiaries.
- The government should work through GhaFFaP to facilitate the timely provision of agricultural inputs at affordable prices to smallholder farmers to encourage them to expand their farms, make investments and increase food production.
- Efficient and cost-effective micro and small-scale irrigation schemes should be introduced to enhance water availability for year-round crop production, reducing vulnerability to shocks and improving production capacity.
- Government and financial institutions should work with existing VSLA schemes to create blended finance facilities that cater to the needs of smallholder households. Such facilities should be coupled with sensitisation programmes that periodically inform households on the productive usage of the credit facility.
- For improved long-term resilience, the government and like-minded international organisations must collaborate with GhaFFaP to provide basic social infrastructure (roads, potable water, storage facilities, dams and irrigation facilities) and to organise periodic sensitisation programmes to develop the entrepreneurial capacities of farmers. This can enable farmers to explore long-term sustainable income-generating activities to improve household food security.
- Access to markets and promoting green forest and farm businesses should be a key priority of building back better. GhaFFaP has established the GhaFFaP Green Market built on the aggregation of baskets of products, value addition, branding and forest landscape restoration. This requires input investments in product aggregation (such as transportation, storage facilities), value addition (such as processing facilities), branding and marketing. GhaFFaP is calling for input investment support and partnerships in building resilient forest and farm producer businesses.

For more details on GhaFFaP, see https://ghaffap.org

4.2 UNORCAC, ECUADOR: SOLIDARITY WITH INDIGENOUS YOUTH AMID PANDEMIC CHAOS

Hugo Carrera and Anna Bolin

UNORCAC coordinated the sourcing of materials and information with the Cantonal Emergency Operational Committee so that members could access and sell products at the local market © UNORCAC

4.2.1 Organisational background

Located in Cotacachi in the Imbabura province in Ecuador, the Union of Peasant and Indigenous Organisations of Cotacachi (UNORCAC – Unión de Organizaciones Campesinas Indígenas de Cotacachi) is a second-tier organisation that covers 45 communities. It represents 3,225 households and in total 15,900 inhabitants of which 7,980 are women, and 89 percent of its members are Indigenous Kichwa.

UNORCAC was officially registered in 1980 and has developed a history of accessing loans, donations, technical advice and training offered by public and private-sector institutions. However, the organisation's history started in the mid-1970s as part of a process of social and political organisation. Initial mobilisation within communities led to the formation of the Indigenous and Peasants Federation of Imbambura (Federación Indígena y Campesina de Imbabura). Within this original federation sprung the independently formed Federation of Communes of the Cotacachi Canton. In April 1977, it became UNORCAC.

In the beginning, the federation's main aim was to fight for the defence of the values of Indigenous culture against racism, exclusion and exploitation suffered by Indigenous people at the hands of landowners, local authorities and religious mestizo of Cotacachi.

Later, through its affiliation with the National Confederation of Peasant, Indigenous and Afro-Descendant Organisations (La Confederación Nacional de Organizaciones Campesinas, Indígenas y Negras or FENOCIN – at the time known as FENOC), peasant demands were introduced into UNORCAC's agenda around land and agrarian reform. In the last two decades, UNORCAC has focused its work on four strategic axes:

- Organisational strengthening of organised communities and groups
- Reaffirmation and appreciation of the cultural identity of the communities
- Access and conservation of natural resources, and
- Economic development of the communities.

Relevant areas of work fulfilling these strategies include:

- Strengthening comprehensive community water management.
- Promoting agro-diverse farms
- Promoting, conserving and using native crops
- Organising native seed, gastronomic and producer fairs to promote peasant marketing in 'short circuit markets'
- Promoting traditional knowledge
- Multiplying and replenishing native seeds
- Environmental education and food safety in rural schools and bio-knowledge centres
- Creating bio-enterprises to add value to native crops, bee products and agro-tourism
- Promoting rural credit and savings mechanisms
- Promoting the declaration of the territory as an agricultural heritage site under the FAO Globally Important Agricultural Heritage Systems (GIAHS) certification initiative.

Over the years, this approach has allowed UNORCAC to maintain a strong social cohesion through various organised groups within the 45 communities. This has included establishing 30 women's groups, 20 ecotourism guide boards and 10 youth groups. This social cohesion and organisation has provided UNORCAC with a high capacity to influence local public policies. Key UNORCAC activities have been instituted through these local groups. The producer fairs have been operating for more than 15 years now and the seed and food heritage fairs for more than 18 years. The savings and credit initiatives have been formalised into a financial cooperative that provides affordable finance to members. The women's groups have been institutionalised within UNORCAC's management structure in the form of a women's committee. Furthermore, two companies have been established adding value to a basket of forest, farm and handicraft products and a further two companies cater for the tourism business. Within UNORCAC, associations for beekeepers, Indigenous medicine and Andean grain producers have also been established, further strengthening their organisation. These achievements are the result of more than 40 years of organisational building and evolution. UNORCAC

also highlights how producer organisations can adapt to changing needs and priorities of its members and its surrounding environment over time. These evolutionary and adaptable organisational characteristics have proven critical in mitigating the impacts and responding to the effects of the pandemic.

4.2.2 Impacts experienced due to the COVID-19 pandemic

Self-isolation and state lockdowns

These have affected both the on-farm and off-farm income earnings of households. When the pandemic first hit there was a general fear amongst UNORCAC's Indigenous communities. As in many other Indigenous territories, initially they did not know how best to deal with the threat of the virus. Therefore, many opted for imposing strong restrictions on mobility in and out of the territories for fear of contagion. This of course had implications on people's ability to work outside of the territories.

Many community members work in urban areas, mainly in the informal sectors such as in petty trading, construction and floriculture. These informal off-farm jobs are mainly carried out by the men whereas the women manage the family farms, known as the *chakras*, which provide important income support to many families. The closure of the Indigenous territories made it difficult for the men to access urban areas and equally for the women to transport and sell their produce at the community fair, which was closed due to the pandemic. From a household perspective this meant an almost instant loss of both income streams. In both cases, as these are largely informal-sector jobs, there is no access to formal social security. Beyond these sources of employment, other community-based enterprises such as the tourism operators and the company adding value to local products, also experienced a complete halt to their activities. Since the initial shock, labour and production activities have partially been reactivated, but in April 2021 restrictions still remained as the pandemic was still on-going.

Access to finance

Community-run and formal financial services were affected by low repayment rates. UNORCAC-supported credit services have been able to alleviate some household income distress. These can be divided into two forms of credit: formal credit (accessed through the regulated financial cooperative) and informal credit (which is run through small community banks made up of women's savings groups and small agricultural credit operations). Informal credit is regulated by community procedures and norms, which made it more flexible and thus able to respond to urgent needs to support household economies, something which was difficult to do for the financial cooperative which is subject to financial regulations. Despite UNORCAC managing to keep both forms working during COVID-19 pandemic, available capital was significantly reduced as people were unable to pay on their interest and credit.

School closures
Children were adversely affected by school closures. Despite the pandemic having severe impacts on all UNORCAC members, there is particular concern for children, who have had their education disrupted. Since the start of the pandemic, education has been suspended at all levels by the government as schools have closed and education has moved online. This has presented challenges as most UNORCAC members do not have the resources to attend online classes. Many families do not have an internet connection and parents have limited ability to support their children in home schooling. There have been some efforts to reopen schools as a pilot in the region. However, the third wave of the pandemic has disrupted this.

4.2.3 Responses to COVID-19 crisis

Working with cross-sectoral COVID-19 response committees
At the local level, UNORCAC collaborates with the government in the pandemic response through the Cantonal Emergency Operational Committee. Its main purpose is to deploy emergency response measures from the government to the local level and is the only link between communities and the authorities. This cross-sectoral platform includes mechanisms for exchanging information and donating products including personal protective equipment. The committee was also crucial in negotiating procedures for reopening marketing spaces with pandemic prevention measures.

Re-organisation of market spaces, locations and timing to improve security
Once bio-secure protocols had been established, UNORCAC supported its members to adopt the new rules and reopen the producer fair. Initially, time schedules were adjusted for different vendors to avoid crowding. The main fair was kept in the same place as before the pandemic. Pre-pandemic, it was only open on a Sunday but now operates on Wednesdays and Fridays to reduce crowds. However, initially when they reopened there were too few producers and consumers. Therefore, UNORCAC reorganised 10 smaller fairs inside the communities, which is also in line with one of their strategies to promote 'short circuit markets'.

Online sales and home deliveries
UNORCAC experimented with online sales and home deliveries after the markets were closed during lockdowns. Initially this worked well and increased demand for their products as people preferred to buy healthy food locally. However, as markets reopened, consumers have returned to the markets and online sales have become less important.

Delivery of agroecology food baskets during the COVID-19 pandemic. Photo © UNORCAC

Renegotiating credit conditions with members' banks
UNORCAC was able to negotiate new rules for their members that allowed them to default on credit for six months without it affecting their credit rating with the bank. After six months, they continue paying as normal. UNORCAC was also able to negotiate a reduced monthly repayment so that producers could continue to invest in production.

Solidarity with children to support their continued education
Many children have risked falling behind a whole year or more in their education. Faced with this difficult situation, UNORCAC organised groups of young people to go to the schools and help the children use the technology needed to participate in online classes. UNORCAC also managed to get funding from expats living near the communities in Cotacachi to purchase 400 laptops that the children could use in online classes. While this helped, it has not been adequate for all the students.

Solidarity between communities and organised groups to ensure food security
Already, members of UNORCAC are at an advantage in that many are self-reliant for their own food production. All communities practice traditional agroecological farming using the *chakra* farming systems, so were not affected by disruptions in supply chains for farm inputs. Surplus food produce that could not be sold at the market was instead exchanged or donated to support those families in need. Through the Cantonal Emergency Operational Committee, UNORCAC was also able to source seeds and vegetable plants between communities and partners to strengthen food production.

4.2.4 Priorities for recovery and building back better

In April 2021, the COVID-19 pandemic was still at a very critical stage in Ecuador. This significantly constrains the ability of organisations such as UNORCAC to engage in dialogue on post-COVID recovery support and priorities for building back better. Although UNORCAC does have an ongoing collaboration with the Cantonal Emergency Operational Committee, this is its only formal channel to the government. The issues they are able to engage with the committee on are quite limited: discussing any issues beyond the current health emergency is a real challenge for UNORCAC. For now, it is only able to engage with the committee on instrumental health needs and issues such as the number of hospital beds available. On top of this, there is an upcoming change of government which will likely make policy engagement even more difficult. So far, the government appears to have no real plans on how go forward. It has been very difficult for UNORCAC to secure any of the limited resources available to the communities. What is needed is concrete government support for these communities to help ensure the survival of their small enterprises.

4.3 FECOFUN, NEPAL: HOW MULTI-SECTORAL PLATFORMS HELPED LEVERAGE SUPPORT

Bharati Pathak and Anna Bolin

Members from Aadhar Ekata and a member of FECOFUN's associated community forest user groups (CFUGs) in Panauti municipality, Kathmandu Valley © Aadhar Ekata

4.3.1 Organisational background

The Federation of Community Forestry Users of Nepal (FECOFUN) represents a nationwide network of 22,266 community forest user groups (CFUGs) in Nepal that collectively manage 2.2 million hectares of community forests. These CFUGs represent the collective forest rights of 2.9 million households in the country, which make up a third of the total population of the country. Through its capacity to mobilise and democratically represent CFUGs at all levels of decision-making under Nepal's federal governance structure, FECOFUN is arguably the most important stakeholder for all matters concerning climate change mitigation and green recovery from COVID-19 pandemic in Nepal.

Historically, the CFUGs have been around since the 1970s. They were established as institutions for ensuring the protection and management of collectively held community forest resources. Over time, these grew into thousands of nested civil society organisations and CFUGs. By 1995, these groups were ready to federate into a nationwide network and formed FECOFUN to help safeguard the rights of forest users. This coincided with the arrival of a new Forest Act (1993) and Regulations (1995) and from this point onwards community forestry in Nepal and FECOFUN have grown to be one of the

strongest grassroots policy advocacy organisations in the forestry sector. Through its presence at community, district, provincial and national level with 50 percent of women in leadership positions, it is also one of the largest and most equitable community forest organisations in the world.

4.3.2 Impacts experienced due to the COVID-19 pandemic

The first case of COVID-19 in Nepal was detected in January 2020 which sparked an early reaction to setting up testing facilities and screening at airports. However, it was not until the end of March that more cases started appearing and the government of Nepal took the decision to impose a national lockdown. One of the early sources of transmission was the return of hundreds and thousands of migrant workers back to the rural areas, both internally and from outside the country, especially India and the Middle East.

Much of the initial quarantining, testing and isolation of this huge influx of people initially fell to the CFUGs as the country's authorities were struggling to keep up. This created a rapid and unexpected shock for FECOFUN and its members across the country. Overnight, income from not just people's own employment and community forest enterprises were affected by the lockdowns, but also external support from family members. Remittances were cut off as most of those members were forced to return home. The lockdown also caused difficulties in accessing food as mobility restrictions were imposed. For more vulnerable households, especially landless ones, food security became an issue.

4.3.3 Responses to COVID-19 crisis

FECOFUN was quick to react and immediately organised meetings with key stakeholders through social media using Skype, WhatsApp and Zoom. It became clear early on that it was difficult for the government to reach remote rural areas, many of which were community forest areas where FECOFUN were in regular communication with CFUG members. For this reason, FECOFUN decided to collaborate with the government to help mobilise CFUG members, who at the time, were busy with harvesting in the community forests and farms. Through its well-established network, FECOFUN was able to quickly set up a communication channel to share information between village, district and provincial levels about what was happening and how communities could stay safe from the pandemic.

CFUG buildings were made available for response activities

After the national lockdown was announced, the prime minister of Nepal organised a meeting with different stakeholders. A key question was how the CFUGs might be able to support the COVID-19 response by providing access to community buildings. Buildings were needed for quarantining returnees and to reduce transmissions, but also to house security staff and health workers (such as the ambulance services needed

to access CFUG areas). In response, FECOFUN coordinated with 500 CFUGs who offered a total of 1,400 buildings.

Food security
Food aid was organised to support the most vulnerable households. CFUGs distributed food every morning and evening to those in need.

Recovery action planning
Early on in the pandemic, FECCOFUN took the decision to focus on collaborating with local governments on action planning as the level of government closest to the people. Through its multi-sectoral platforms at district and provincial levels, FECOFUN worked with 11 local government authorities to come up with COVID-19 response action plans, which are now being implemented to provide direct material support. The high mobility of returning migrants is making it difficult to plan the levels of support needed as people come and go. Consequently, FECOFUN is also collaborating with the government on data collection to understand needs.

Mobilising CFUG finances to leverage local government funding
When it came to the implementation of the COVID-19 response action plans, unexpectedly, FECOFUN found that most funds were locked up at the federal government level. Normally, local government authorities are independent in the planning of much of their own expenditure. But during the initial lockdown period, all response budgets were held by the federal government and then channelled downwards. This made it nearly impossible to access funds quickly. FECOFUN realised that this is an area where CFUGs can also provide funds, based on the income generated from community forests. However, this was decided on the condition that the local government would take the lead in executing the response action plan. Consequently, between March and May 2020, a total of 252 CFUGs invested USD 170,000 in cash support for the COVID-19 response, of which USD 70,000 went directly to the local government's relief fund. This initial commitment and upfront contribution from the CFUGs provided pandemic relief to over 152,700 poor and vulnerable people. It was instrumental in unlocking funds further up the chain and helped local governments to also step up their actions.

4.3.4 Priorities for recovery and building back better

The COVID-19 pandemic is not the first major crisis where FECOFUN has stepped in to help mobilise emergency relief to local people. During the 2015 major earthquake, FECOFUN were also part of the response because of their ability to quickly act based on their collective resources and decision-making power. However, this time, Nepal's new decentralised governance structure (that came into force in 2017) made a big difference. It made it much easier for FECOFUN to mobilise support and collaborate with local governments. As of May 2021, Nepal is experiencing a new wave of COVID-19 transmissions following the high-level outbreak in India. This is likely to delay

discussions on recovery and building back better. Nevertheless, there are several areas where discussion have already started:

- Forestry and agricultural sectors are likely to be critical in the recovery phase. Many people are returning from abroad so this is where food security needs to be ensured and jobs created. Local government budgeting is critical for supporting. Local governments should already be looking into how much can be allocated to support enterprise development in the forestry and agricultural sector. At the same time, if response funding continues to flow from the central to the local level, FECOFUN must be actively involved with influencing the whole funding channel to ensure allocation is informed by local needs and priorities.
- Already, FECOFUN has identified which types of community forest enterprise (such as ecotourism, NTFPs and timber) require the right level of support to help scale up activities and absorb returning migrants. This is also highly relevant for the government's agenda to promote green jobs and forestry livelihoods, especially for youth. For this purpose, data collection on returning migrants is important to understand employment needs.

4.4 AFIN, Bolivia (Plurinational State of): building back better through collective and traditional territorial management

Rolando Rubén Vargas Nina and Anna Bolin

Forest use in the Santa Mónica community forest-management area © AFIN

4.4.1 Organisational background

The National Indigenous Forestry Association (Asociación Forestal Indígena Nacional – AFIN) is a third-tier organisation that provides technical and advocacy support to 43 community forestry organisations. These are organised into 11 second-tier regional Indigenous forest associations in five departments in Bolivia (Plurinational State of) (Santa Cruz, Beni, Pando, La Paz and Cochabamba). Collectively, they represent 10,000 families from the Guarayo, Chiquitano, Sirionó, Moxeño, Chácobo-Pacahura, Yaminahua-Machineri, Tacana, Yuqui- Yuracaré and Ayoreo Indigenous communities who control and sustainably manage 3.5 million hectares of forest resources in their territories.

AFIN is considered as the business-operating arm for the management of forest resources in the country's Indigenous territories by the national parent organisation, the Confederation of Indigenous Peoples of Bolivia (Plurinational State of) (Confederación de Pueblos Indígenas de Bolivia or CIDOB). The association was formed in 2005 to meet the emerging needs of Indigenous communities who, because of pivotal land and forest law reforms that came through in the mid-1990s, had acquired extensive Indigenous territories that needed sustainable forest management plans. Prior to these reforms, Bolivia (Plurinational State of)'s forests were controlled by industrial logging companies and there was a real risk that these actors would continue to control these

resources, unless the Indigenous communities themselves learnt how to develop their own forest-management plans and enterprises. These management plans are built around long histories of Indigenous Peoples living in these territories and their wide worldviews which are based on care, protection and conservation of the land which is a source of social fulfilment and livelihoods. AFIN was born as a strategy by the founding community members and CIDOB to consolidate these values and achieve control over the territories and their use through conservation and the development of timber and NTFP enterprises. This would in turn allow them to generate employment and income for men and women in the communities.

Now, 15 years after formation, AFIN's members have been empowered with the rights to collectively manage their territories, the size of which has increased ten-fold. These rights are consolidated with irreversible collective tenure titles (Indigenous community lands/*tierras comunitarias de origen* or TCOs) that are recognised by the Bolivian Constitution. Many of the AFIN communities have also established advanced processes of adding value to and marketing their timber and NTFPs and linking with financing systems. This is a testament to the successful ability of CIDOB to defend their collective rights (such as to land and territory, and economic, cultural and political rights) and to AFIN's ability to support the development of community forest enterprises through its democratic and autonomous management structure. To be clear, this success is part of a much broader social-political movement in Bolivia (Plurinational State of) that has resulted in titled TCOs now amounting to more than 20 million hectares.

4.4.2 Impacts experienced due to the COVID-19 pandemic

Like many other countries around the world, COVID-19 arrived in Bolivia (Plurinational State of) in March 2020. The government responded quickly by closing schools and borders and implementing a national lockdown two weeks later. The initial measures lasted until the start of June after which social gatherings, mobility restrictions and public transit policies were eased. Response decision-making was then devolved to departmental and municipal governments. However, during the months of June and July, Bolivia (Plurinational State of) experienced a surge in COVID-19 cases and fatalities. Nearly half the population of Bolivia (Plurinational State of) are Indigenous and therefore particularly vulnerable to an outbreak in their communities where access to public health services is typically limited or non-existent. Despite the likely severity of impacts, reporting on the spread of the pandemic focused on urban areas. No specific measures were put in place to tackle gaps in access to healthcare, social security or basic aid in Indigenous communities. This was of particular concern as many of the lowland Indigenous communities had already been affected by the forest fires in 2019 and the ensuing economic crisis in the forest sector, meaning livelihoods were already severely strained (see Box 4). After intensive lobbying from Indigenous groups in the country, including AFIN, in June 2020 the government finally put in place a plan to assist Indigenous families. However, much of the response was still being managed by the Indigenous communities' organisations themselves. The following sections outline some of the main impacts and response measures undertaken by AFIN members during the pandemic.

Weakened political engagement
Both AFIN and CIDOB have had to reduce their meetings and political engagements with member organisations and local authorities because of representatives either being directly affected by the virus or because of movement restrictions. However, little by little, members' organisations are adapting their practices to include biosafety measures to get back on track.

Lack of access to public health services
Men and women in the Indigenous territories have been falling ill during the COVID-19 pandemic but have limited to no access to treatment in community or municipal health centres.

Lack of information and communication from authorities
There is widespread fear and anxiety due to the uncertainty surrounding the pandemic and general lack of information on the virus and how to contain its spread. This has contributed to an environment of insecurity and psychological stress in the communities.

Reduced cultural and social activities
Important gatherings that are part of associative and community life (assemblies, meetings and others) have been paralysed for fear of contagion, which has further contributed to feelings of isolation and insecurity.

Returning migrants
There has been an increase in rates of returning migrants settling in Indigenous territories. This is not of concern when migrants are already a part of the communities and they can join existing activities. However, it creates a problem when they are external migrants encouraged by government policies promoting land reclamation for agricultural purposes. Although their actions are in contradiction with the devolution of forest tenure rights to Indigenous communities, not all forests have been mapped or have management plans developed and this weakens the ability of Indigenous Peoples to exclude outsiders.

Timber and NTFP production activities have been paralysed
Business partnerships with both public and private-sector actors have come to a halt, creating difficulties in hiring skilled personnel and generating temporary employment for men and women in the communities.

Loss of income and food security
The economic impact on families is causing situations of insecurity and distress, with many households desperate to buy food. The community forest enterprises had no contingency plans for risks such as those arising from COVID-19 pandemic, or even the major forest fires of 2019 and 2020 (see Box 4). Establishing a mechanism for the

enterprises to generate savings that can act as a buffer and allow them to face these types of risks is now being considered.

4.4.3 Responses to COVID-19 crisis

In the absence of state leadership, AFIN and its member organisations have organised several response measures to support communities in containing the spread of the virus. For example, voluntary collective isolation and controls on entry and exit to the communities were organised by AFIN members to control the risk of COVID-19 transmission. Additionally, between March and September 2020 an internal mechanism was set up to ensure that information was regularly available within communities (for example, on biosecurity measures) and to fill external information gaps on the impact of the pandemic within the Indigenous territories. There were several examples of communities establishing their own solidarity systems for bringing food into the territories and meals to those most in need. Three main lessons from the pandemic stand out to AFIN as having been critical during the response.

Diversifying forest and farming activities

The first main lesson is the importance of strengthening the diversification of forest and farming activities within the territories. This is an institutional commitment that AFIN has made to support its members' communities to generate greater opportunities for families. For example, family farming was of increased importance during COVID-19 responses due to the reversed migration that saw many family members returning home from urban areas during the pandemic. Agroforestry is also becoming an important activity, mainly for young people, who have started taking opportunities within their organisations to start up agroforestry enterprises. These entrepreneurial activities now need to be made more valuable and productive so that food and income security can be strengthened. To support this, AFIN's technical team is working with community members to strengthen capacities in both production and entrepreneurship and linking these to new opportunities for accessing key resources.

Complementing primary health services with traditional medicine

The second key lesson is that strengthening the knowledge and use of traditional medicine is an important strategy that can complement access to primary health services. AFIN have held awareness-raising sessions to value and strengthen the use of traditional medicine in the communities. This has been complimented by other measures such as the collaboration with representatives from the Ministry of Health to improve access to primary health services for community members.

Organising entry and exit controls

The third main lesson is the importance of organising entry and exit controls. This has had a positive impact on Indigenous communities' overall control over their territories and the activities happening there. These are vast areas that are under constant pressure

from illegal extractive activities of various kinds and of farmers seeking new land for cultivation at the forest frontier.

4.4.4 Priorities for recovery and building back better

Risk management

Another key lessons of this pandemic for AFIN has been on the importance of risk management. In many ways, AFIN believe that the impacts of COVID-19 pandemic would have been less if it had had a more effective risk-management strategy. Although AFIN did have a risk-management strategy, it existed mainly on paper rather than in practice. It also did not consider or account for unexpected challenges such as the pandemic or the forest fires of 2019 and 2020. In a post-COVID scenario, AFIN feels such a risk-management strategy should be developed and enacted in collaboration with government authorities as part of recovery planning. To do this, spaces need to be created for analysis and reflection on community health and risks, such as those arising from COVID-19 pandemic, forest fires and droughts to learn lessons and adapt behaviours to minimise the risk of negative impacts.

Organisational strengthening meetings with the Santa Mónica forest-management plan board © AFIN

Information management

Ideas on risk management have also led AFIN to think on the importance of information management. AFIN is particularly keen to address how information can be managed in a way that is helpful for communities, allowing them to clearly understand evolving situations and to avoid experiencing the fear that was associated with a lack of information during COVID-19 pandemic. Additionally, at an organisational level, AFIN requires improved access to information to allow them to take decisions at times of crisis.

Indigenous economic revival

For recovery efforts to be effective, AFIN feels the government of Bolivia (Plurinational State of) also needs to consider the economic revival of the enterprises in Indigenous communities and create programmes that can promote and strengthen them. AFIN is doing its part in strengthening technical, administrative, commercial and leadership capacities at the community level, but they need support and investment. From this perspective, AFIN is working on a new proposition for a revised forest law that identifies the needs and rights of the different Indigenous Peoples' territories to help improve the

current situation and the degree to which its members can realise benefits from their territories.

Formal recognition of community forest enterprises

Finally, AFIN consider that a clear public policy of formal recognition of community forest enterprises by the state is needed. This would promote community forest enterprises' access to local and national markets with clear rules and to the national financial system under appropriate conditions. These are measures that can significantly contribute to the consolidation of community forest management in Bolivia, reverse the current crisis in the forest sector and minimise the effects of COVID-19 crisis on the political, social, economic and environmental lives of Indigenous communities.

4.5 FIFATA, MADAGASCAR: HOW AGROECOLOGY STRENGTHENS SELF-RELIANCE AND CLIMATE RESILIENCE

Fanja Nirina and Anna Bolin

Field exchanges are crucial for learning and the associative life of being a FIFATA member. However, they have been significantly reduced during the pandemic © Andry Rakoto Harivony, FAO

4.5.1 Organisational background

The Association for Progress among Peasant Farmers (Fikambanana Fampivoarana ny Tantsaha – FIFATA) is a national umbrella organisation of forest and farm producers. It was created on 29 September 1989 by a group of 500 farmers from the Vakinankaratra and Amoron'i in the Mania regions in the highlands of Madagascar. The members formed FIFATA in response to long-experienced challenges in accessing land and securing tenure to support their families and livelihood. They realised that to advocate for their interests, they needed to build a strong base for mobilising farmers' voices. Based on this they set out to form FIFATA and spread awareness among other farmers.

Today, FIFATA has 300,000 member households, distributed across 12 regional and 6,000 local farmers' organisations. It is now a nationwide umbrella federation, organising smallholder forest and farm producers in 11 regions of Madagascar (Sofia, Alaotra Mangoro, Itasy, Bongolava, Vakinankaratra, Amoron'i Mania, Menabe, Haute Matsiatra, Ihorombe, Vatovavy and Fitovinany). Members are structured into 24 regional sector unions supporting members with technical assistance, marketing services, access to agriculture inputs, and advocacy support related to their specific regional and national context, production and marketing needs. Within this structure, operates the FIFATA

group, which is a committed group of actors specializing in the development of services to member producers. FIFATA plays a key role in linking and strengthening synergies between these different organisations.

While the producers mainly engage in the agriculture and livestock sectors, many are also currently supported by FIFATA in agroecological production and reforestation activities. These strategies are being encouraged in response to challenges of land and forest degradation such as soil erosion and climate change which are prevalent in both the farmland (interior) and coastal (Menabe, Vatovavy and Fitovinany) areas. Forest use is quite limited and mainly involves the collection of some NTFPs such as honey and cloves. The latter is integrated into mixed agroforestry systems. Nevertheless, forests play a key role for members' overall well-being at different times of the year. They provide a safety net for the collection of food, medicinal plants, fuelwood and fodder for livestock.

Members of FIFATA greatly benefit from the technical assistance and other services provided through its network and partners such as Fert, a French association for international cooperation for agricultural development that has been a core partner for over 30 years. But farmers are still highly vulnerable to the effects of climate change. In this sense, the COVID-19 pandemic is just one example of a several serious challenges putting smallholder farmers' lives and livelihoods at risk in Madagascar. Already before the arrival of the pandemic, producers were facing challenges imposed by climate change. These include extreme weather events and variability affecting crop production, and increased pressure on water resources and water availability. Water scarcity and stress affect both food production and food security. Exactly what is causing this water stress is being investigated by FIFATA. Findings will inform its ongoing advocacy for implementing a more integrated water-management strategy in the country.

Underlying issues such as climate change and water scarcity are likely to aggravate the impacts of the pandemic on already vulnerable communities. Within this context, soil and forest restoration and agroecology activities are key strategies for helping farmers strengthen their socio-economic and ecological resilience against the effects of climate change. However, such efforts from FIFATA are at odds with the state-led promotion of industrial agriculture, which in some regions is leading to land-grab conflicts, further increasing vulnerability of smallholder farmers.

4.5.2 Impacts experienced due to COVID-19 pandemic

It is against this backdrop that COVID-19 arrived in Madagascar in March 2020. Like in many other countries, the Malagasy government imposed restrictions on the movement of goods and people early on in the pandemic, locking down major markets, restaurants and taverns, to limit the spread of the virus. Most transmission occurred in urban areas, with relatively low health impacts in rural areas. Consequently, most of the impacts of the pandemic reported by FIFATA members have been of an economic nature.

Perhaps most strikingly, the pandemic revealed the reliance and interdependency between urban and rural economies. At least 80 percent of food produced in Madagascar's rural areas is sold in its urban centres. The overnight closures of markets, restaurants

and transport links to urban areas meant that demand for agriculture and forestry products dropped dramatically. As a result, contracts and food orders were cancelled and producers were left without payment for their prepared deliveries. It also created an urgent shortage of intermediaries moving goods and services between producers and consumers in urban and rural areas, leading to price hikes of 300 percent for transport. These disruptions caused a ripple effect on the cost of inputs and food as well as on information sharing and communications. Impacts have varied from region to region depending on restrictions, but typically involve those outlined here.

Loss of income
A significant amount of produce is being left unsold because of the limited market opening hours (only during mornings; weekly market days have also been suspended). Products destined for markets outside the region cannot be sold because transport links are blocked.

Transport blockages are affecting production, storage and marketing
Farmers are decreasing their production in response to the lack of supply of inputs needed for crop cultivation (such as the transport of seeds between regions), the inability to transport products (for example, hundreds of kilos of onions were left to perish because of that lack of transport) and the unavailability of animal vaccinations.

Not being able to circulate in the city has led to difficulties in supplying inputs and agricultural equipment. Consequently, farmers encounter many obstacles in the preparation of their farms off-season and for the high season to come. At the same time, agricultural advisers, and the farmers they support, have experienced many difficulties to connect because of barriers in communication. Because of movement restrictions, they have been forced to talk over the phone, which is not yet within the reach of all farmers due to the costs incurred and the lack of electricity in some places where farmers live. As for the storage of agricultural products, there is not enough storage buildings to support the needs and where farmers do have them, they need improvement.

Diminishing prices
The prices of products continue to fall causing a loss for producers. In addition, collectors take advantage of the situation and buy at a lower price than usual.

Security issues
There has been a spread of social insecurity in rural areas due to theft (for example of food crops).

Damaged social relationships and networks
The associative interactions and relationships that came with being a member of FIFATA have been completely devastated by social distancing. For example, the organisation of meetings has been disrupted and technicians who normally provide farmers with

advice have been unable to visit farmers in the field. All communication and relations with partners have been brought online or by phone, which limits the expression and exchange of needs and opinions.

4.5.3 Responses to COVID-19 crisis

Throughout the pandemic, FIFATA has tried to continue with its provision of technical assistance and other services to its members, both on the ground and remotely via telephone and e-mail. Political space for engaging on any matters than other health and protection urgencies related to the pandemic has also been limited. However, FIFATA have continued to organise within their networks and with civil society organisations to try and open up spaces for dialogue on economic impacts, water access and land rights issues (the latter is especially a concern in the southern regions). The following sections outlined some of the key responses adopted by FIFATA to mitigate COVID-19 related impacts.

Strengthening agroecology practices

One of the most important factors that has helped reduce members' vulnerability to the impacts of COVID-19 crisis is the knowledge and practice of agroecological farming. This support started before the pandemic and has proven to be a resilient strategy when faced with supply chain disruptions (and other long-term challenges such as soil erosion and climate change). Agroecological trainings have promoted members to make their own organic fertiliser and pesticide. This means that members are not dependent on other businesses in the city to supply them and thus have been more resilient to disrupted supply. Another benefit is that it has improved the quality of the products, which has also helped with market access as agroecological products are sought after by consumers.

Compost making by a member of the Miaramandroso cooperative, one of FIFATAs members. Photo © Andry Rakoto Harivony, FAO.

Increased monitoring of needs
With the government's attention focused on the urgency of the pandemic, FIFATA has been working on the one hand through its networks to identify and respond to members' needs, on the other to facilitate the supply of various inputs such as good quality seeds and post-harvest materials.

Mobilising existing resources to train and enrol young farmers
Due to the imposed lockdowns, many communities have also seen a high return of youths seeking employment in rural areas. Many face the challenges of not having knowledge or skills in forest and farm production or any land of their own, which makes setting up a business difficult. To support these young people, FIFATA is mobilising its resources in local areas to organise short training courses that help these young people to get into the farming profession, by using basic technicians and lead farmers at the community level.

Organising and promoting online sales
Another important response strategy to the closing down of markets has been the promotion of online sales, including for fresh produce such as vegetables, fruit, fish and chickens. Some farmers organised their own transport to arrange for direct delivery to consumers. Meanwhile, FIFATA has organised storage facilities and consumer awareness-raising campaigns. These are examples of new forms of organisation and innovation triggered by COVID-19 pandemic. The online sales have made a big difference and proved to be a good alternative to regular market channels, thereby helping to reduce product and income losses.

4.5.4 Priorities for recovery and building back better

To prevent further economic, social, political and environmental impacts and to avoid a possible food crisis, FIFATA and its associated networks are prioritising the following actions.

Strengthening self-reliance within supply chains from production to marketing
This includes strengthening the seed production system and provision of other agricultural inputs needed to ensure continuity and availability of quality inputs in a timely manner. It also includes facilitating and supporting the marketing of agricultural products (for example, analysing market demand and linking producers with regional and national buyers) and supporting producers in using storage facilities for aggregating and selling produce in bulk.

Young woman harvesting carrots together with her association. Photo © FIFATA

Maintaining food supply chains
Healthy food that generates good nutrition will be another priority for advocacy and internal marketing campaigns at the municipality, district, region and national level. Currently, at least 10 percent of rice consumed in Madagascar is imported. Rather than importing, FIFATA believes this need could be met by domestic producers.

Continuous contribution to civic duty representation and defence of farmers interests
FIFATA will continue to engage in political dialogue with the Malagasy State to improve the political environment for family farmers, who are the guarantors of food security for the nation. It will also continue to engage with its technical and financial partners to mobilise economic, social and environmental resources to facilitate producers' sustainable production, including land, financing, technical skills development and access to markets for a professional and competitive family farming sector that continues to grow. These activities equally contribute to the achievement of the Sustainable Development Goals 1 (no poverty) and 2 (zero hunger), made even more critical now as the challenges brought on by the spread of the COVID-19 pandemic risks causing a food crisis. For these reasons, FIFATA is now calling for the support of family farmers as a priority, for access to materials, agricultural inputs, and good quality or even improved seeds. The state initiative in providing access to hybrid seeds is laudable, but family farmers expect the development of quality and improved locally produced seeds.

5. Impacts of COVID-19 crisis on forest communities

In this section we collate the impacts described by the case study organisations in Section 4. These impacts are supplemented by wider examples from the literature on COVID-19 crisis and past crises to highlight the diverse range of social, economic and environmental impacts seen in forest communities.

5.1 SOCIAL IMPACTS ON FOREST COMMUNITIES

5.1.1 COVID-19 impacts on health

Direct health impacts of COVID-19 pandemic were often hard to contain in forest communities due to limited access to sanitation and healthcare (FAO, 2020c; Meneses-Navarro *et al.* 2020). In some instances, direct health impacts are likely to continue as global vaccine inequalities persist (Aryeetey *et al.* 2021; Oxfam, 2020) and will be most severe for vulnerable groups. For example, in Latin America there have been reports of disproportionally higher mortality rates among Indigenous and Afro-descendant communities than within white populations (ECLAC, 2021; Menton *et al.* 2021).

In areas where local histories between communities and states and/or humanitarian agencies are characterised by distrust, even available infrastructure has in some cases failed to mitigate direct health impacts. For example, in Brazil, members of the Mebengokrê (Kayapó) people rejected treatment for COVID-19 from outside their village because they did not trust state officials to respect their traditional funeral rituals (Menton *et al.* 2021). In contrast, where community–state relations were characterised by long-built trust (such as well-supported *gram panchayats* or local governments in Kerala, India) the direct health impacts of COVID-19 pandemic could be managed through rapidly established effective and collaborative health measures such as communication programmes, contact tracing and quarantine management (Dutta and Fischer, 2021).

COVID-19 pandemic has also had significant indirect health impacts that have affected rural and urban populations more broadly, but that are also of concern to forest communities where access to health services is more limited. National lockdowns and increased time in the home have driven rising instances of sexual and gender-based violence (Power *et al.* 2020). Additionally, due to pressure to provide COVID-19 relief, there has been reduced access to other key health services such as HIV testing (Ponticiello *et al.* 2020) and reproductive health (Mackworth-Young *et al.* 2020). Additionally, COVID-19's adverse impacts on all aspects of the food system have negatively affected food security and hence health. This effect may be compounded by social factors such

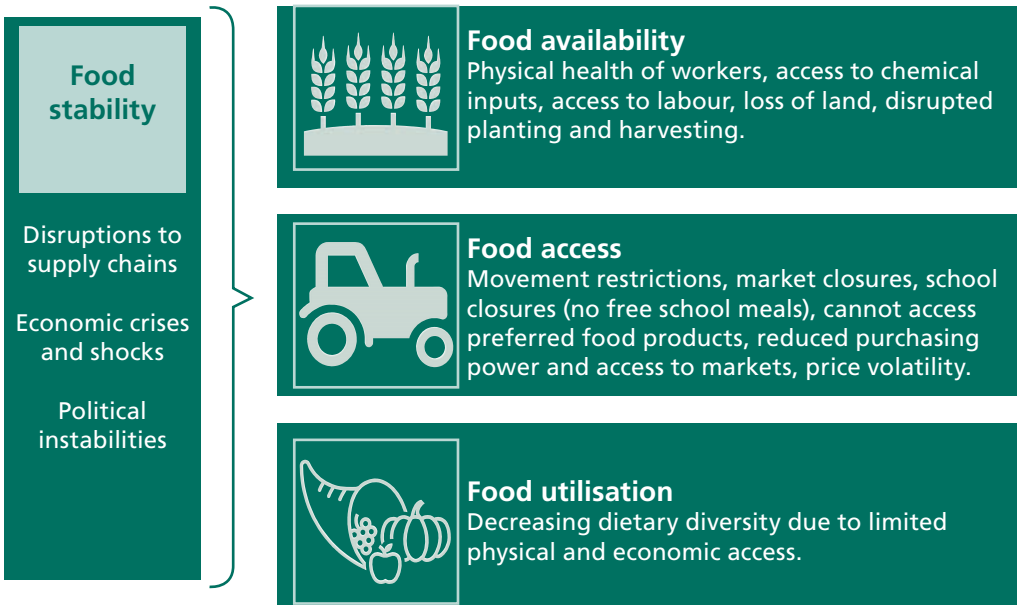
as harmful gendered eating norms that may see women eat last and worst (Doss *et al.* 2020; Paganini *et al.* 2020). Such gendered eating norms were a key finding of the GhaFFaP COVID-19 survey.

Mental health issues have also increased due to the stress and uncertainty associated with COVID-19 crisis (RECOFTC, 2020). Mental stress was exacerbated in many communities that lacked timely, accurate, or culturally appropriate information on the status and spread of COVID-19 (Mackworth-Young *et al.* 2020; Pimentel and Ormaza, 2020). Further stress stems from awareness about the lack of necessary health infrastructure and access to treatment (Meneses-Navarro *et al.* 2020). All five case studies included in this paper mentioned these stresses.

5.1.2 COVID-19 impacts on food security

Similar to the HIV/AIDS crises, the 2008 financial crisis and the Ebola virus disease outbreak (Fan *et al.* 2020; Savary *et al.* 2020), COVID-19 crisis has created or exacerbated precarity in all four pillars of food security (see Figure 6).

Figure 6 How COVID-19 pandemic has impacted all four pillars of food security for smallholder producers


Food stability
Disruptions to supply chains
Economic crises and shocks
Political instabilities
Food availability
Physical health of workers, access to chemical inputs, access to labour, loss of land, disrupted planting and harvesting.
Food access
Movement restrictions, market closures, school closures (no free school meals), cannot access preferred food products, reduced purchasing power and access to markets, price volatility.
Food utilisation
Decreasing dietary diversity due to limited physical and economic access.

Particularly adverse impacts are likely to be felt by marginalised groups including low-income households who cannot afford inflated food prices (Balana *et al.* 2020), landless individuals who cannot fall back on diverse subsistence agriculture (Nyantakyi-Frimpong, 2017), women widowed by COVID-19 who, through the assertion of patriarchal norms,

lose access to land and thus food (FAO, 2020c; Harrisberg, 2020; Slater and Wiggins, 2005), individuals that are net buyers of food and thus reliant on now inaccessible markets (Fan *et al.* 2020). For more detailed examples of COVID-19 food security impacts and coping strategies, see the GhaFFaP case study.

5.1.4 COVID-19 impacts on education

As with previous disasters, the education of low-income children, especially girls, is likely to be most affected by COVID-19 disruptions (UN DESA, 2020c). For example, following the 1988 Nepal earthquake the education of low-caste girls was most severely impacted, affecting long-term labour market outcomes and potentially widening caste divides (Paudel and Ryu, 2018). The education of children in remote forest communities, who often lack internet access or electricity, will be particularly affected as online learning options are unavailable (as described in the UNORCAC case study). Despite this lack of access, in many cases, exams are going ahead as normal. Consequently,

> *[T]here are significant chances that they [Indigenous youth] will be left behind and the effect of the pandemic will endure throughout their academic and working life (Pimentel and Ormaza, 2020: 35).*

5.1.5 Cultural impacts of COVID-19 crisis

Worldwide, including in forest communities, COVID-19 crisis has disrupted culturally important events such as funerals and festivals, causing further social distress (Pimentel and Ormaza, 2020; Power *et al.* 2020). However, the greatest impact of COVID-19 pandemic on culture will likely come from the loss of clinically vulnerable elders who are keepers of local knowledges, languages and histories, which are typically preserved and passed on orally (Russo Lopes and Bastos Lima, 2020; UN DESA, 2020d).

For example, in August 2020, Chief Aritana Yawalapiti, one of Brazil's most influential Indigenous leaders, passed away from COVID-19. He was one of only three remaining elders to command fluency of his native language (Astor, 2020). Additionally, in February 2021, the passing of Aruká Juma from COVID-19 marked the loss of the last remaining male member of the Juma Indigenous group in the Brazilian Amazon (BBC, 2021). The loss of such elders and their knowledge is devastating for their people and communities. But it is also devastating for the wider world. Habitat destruction and biodiversity loss is linked to the emergence of novel zoonotic diseases such as COVID-19 (FAO et al. 2020, WHO 2021). As evidenced by Indigenous responses to COVID-19 crisis, we have much to learn from their holistic worldviews, where people strive to live in harmony with the natural world (Curtice and Choo, 2020; Sutherlin, 2020).

5.2 ECONOMIC IMPACT OF COVID-19 CRISIS ON FOREST COMMUNITIES

5.2.1 COVID-19 crisis has disrupted access to key inputs

The availability of labour, which is key to most forest and farm production systems, has been variably affected by COVID-19-related movement restrictions and fear of congregating in groups. This was also observed during Ebola virus disease outbreaks (de la Fuente *et al.* 2019). In some instances, movement restrictions have resulted in surplus labour leading to a suppression of wages. In others, labour shortages have increased demand and thus wages (Ceballos *et al.* 2020; Kumar *et al.* 2021). These variations in labour availability affect both wage workers and farmers, especially those who harvest labour-intensive and perishable crops like fruit and vegetables (FAO, 2020g). Some communities were able to mitigate labour challenges by continuing to rely on organised community-based labour exchange (Adhikari *et al.* 2021), using returning migrant workers (Boughton *et al.* 2020) and mechanising (Salazar *et al.* 2020).

COVID-19 pandemic has also disrupted supply, distribution and price stability of key agricultural inputs such as seeds (de Boef *et al.* 2021; Zimmerer and de Haan, 2020) and agrochemicals (Gadal *et al.* 2020; Tamru *et al.* 2020). In Nepal, smallholder farmers reported the average price of key agricultural inputs rose by 17 percent during the height of the pandemic (Gadal *et al.* 2020: 550). Such fluctuations in the availability and price of inputs threatens productivity, income and food security. In some instances, losing access to inputs was offset by increasing women's agricultural labour, compounding other gender-based impacts of COVID-19 pandemic (Doss *et al.* 2020).

Training on the establishment of tree nurseries in Madagascar. Photo © FIFATA

Another important impact from COVID-19-related transport disruption has been reduced access to extension services (FAO, 2020g). Some communities suggested a lack of timely access to information had reduced productivity, with 57 percent of farmers in Dang, Nepal reporting that their productivity suffered due to a lack of quality agricultural information, creating reductions in income (Alvi *et al.* 2021). Additionally, in Madagascar, FIFATA reported the lack of face-to-face interaction and direct access to technical assistance negatively affected social relationships and networks.

5.2.2 COVID-19 crisis has changed market demands and food prices

Individuals and communities that have maintained access to markets have still seen their incomes affected by COVID-19 crisis, which has greatly increased market volatility (Clapp and Moseley. 2020). While not yet at the levels following the 2008 financial crisis (Barrett, 2020), the pandemic has led to reduced demand for certain products, putting downward pressure on prices. For example, during the first national lockdown in Nepal (April to June 2020) there was a 62 percent drop in vegetable prices compared to pre-lockdown (Gadal *et al.* 2020). In Latin America and the Caribbean, 67 percent of 105 family farmers surveyed by the Inter-American Development Bank reported experiencing reduced prices as a result of loss of market demand (Salazar *et al.* 2020). In Sumatra, Indonesia, smallholder farmers experienced a 50 percent reduction in coffee prices (The Rainforest Alliance, 2020). Similar experiences were reported by GhaFFaP in Ghana and FIFATA in Madagascar. While income was compromised by falling prices of marketed crops, in many instances the cost of living was rising as the price of staples increased. For example, in Ghana, GhaFFaP reported hoarding had created artificial scarcity and inflated prices of essential staples such as maize, plantain and cassava.

5.2.3 COVID-19 crisis has decimated forest-based tourism

COVID-19's unprecedented halting of international travel has decimated tourist-related income for forest communities (FAO, 2020a; RECOFTC, 2021; The Rainforest Alliance, 2020; UN DESA, 2020e). This has affected both tourism operators and other local businesses that rely on tourists, such as local businesses run by women, who make and sell ornaments, beads and other products (Pimentel and Ormaza, 2020). The loss of income from ecotourism, which had provided incentives to reduce environmental degradation (Lindsey *et al.* 2020), enhances the risk of encroachment into forest areas (Zahawi *et al.* 2020). In other cases, even where the pandemic has cut off revenue from ecotourism activities, local communities have been able to turn to their community forests to diversify into other activities (RECOFTC, 2021).

5.2.4 COVID-19 crisis has led to economically harmful coping strategies

Several observed coping strategies adopted to mitigate COVID-19's economic challenges may cause longer-term economic hardship. For example, the acquisition of loans from informal money lenders can create long-term indebtedness (FAO, 2020h). The selling of durable assets may undermine future ability to generate income and respond to

subsequent shocks (Nguyen *et al.* 2020). The GhaFFaP survey revealed these strategies as fairly common among members.

5.3 ENVIRONMENTAL IMPACTS OF COVID-19 CRISIS ON FOREST COMMUNITIES

5.3.1 COVID-19's impact on deforestation

COVID-19 pandemic has caused some localised (and likely ephemeral) instances of environmental recovery in the absence of harmful human activity (Zahawi *et al.* 2020). But evidence suggests that deforestation increased in many countries during 2020 (Kaimowitz and Wunder, 2021). COVID-19-related impacts on food security and household income have led to increased legal and illegal extraction of forest goods such as medicinal plants (Amigo, 2020; FAO, 2020i), fuelwood (Forest and Farm Facility, 2020b; The Rainforest Alliance, 2020), wild foods (Ahmed *et al.* 2020; Gupta *et* al. 2020; Vikalp Sangam and CFR-LA, 2020) and timber (Waibel *et al.* 2020) for consumption and local marketing.

In some cases, increased extraction may constitute overharvesting, causing forest degradation (Anyonge *et al.* 2006; FAO, 2020a). This form of encroachment and over-harvesting increases as urban–rural migration triggered by COVID-19 crisis raises local food demands and leads to the utilisation of previously fallow lands (Adhi*kari et al.* 2021). Patterns of increased resource extraction and pressure are common after crises and were also seen in response to HIV/AIDS epidemics in Southern Africa (Anyonge *et al.* 2006).

However, the relationship between COVID-19 pandemic and deforestation is highly variable across countries. It is mediated by pre-existing deforestation trends and broader political and economic environments (Kaimowitz and Wunder, 2021). Therefore, site-specific impacts warrant further investigation. Where increases in deforestation have occurred, they are not only a concern for forest communities who depend on forests for their prosperity (Macqueen *et al.* 2020; Miller and Hajjar, 2020). At worldwide scale, deforestation can have a broader impact, affecting global sustainable development to which forests contribute significantly global sustainable development to which forests contribute significantly (FAO, 2020j).

5.3.2 COVID-19 crisis crisis has disrupted community forest-management processes

In some instances, COVID-19-related disruptions led to local communities and their organisations being unable to participate in forest-management activities. For example, in Thailand communities were concerned their voices would not be heard as COVID-19 movement restrictions meant they were unable to complete ground surveys required for forest-management plans or attend public hearings, which were moved online to comply with COVID-19 restrictions (RECOFTC, 2020). The lack of community participation in forest decision-making is not only ethically unjust, especially in cases where free prior and informed consent (FPIC) should be applied. It also limits the chances of sustainable

forest management, which is typically more successful when local institutions can meaningfully engage in the process (Hajjar *et al.* 2020).

5.3.3 COVID-19 crisis has led to encroachment on forest land

COVID-19 pandemic has been used as an opportunity for physical and legislative encroachment on forest lands by outside actors (Cotula, 2021; Dil *et al.* 2021; Roy, 2020). This includes encroachment by individual and corporate actors who have been emboldened by the rolling back of social and environmental safeguards as seen in Brazil, Colombia, Democratic Republic of the Congo, Indonesia and Peru (Dil *et al.* 2021). Widely observed globally, the COVID-19 crisis has been used as a cover to dismantle or ignore environmental regulations that protect forest communities (Dil *et al.* 2021; Spring, 2020), commit acts of violence against forest defenders (Global Witness, 2020) and rush through inadequate consultation processes for contentious projects (Cotula, 2021). This represents a worrying continuation of structural violence and environmental injustice against forest communities, mainly in pursuit of large-scale extractive industries such as mining and agriculture (Dil *et al.* 2021; Earthworks *et al.* 2020; Menton *et al.* 2021).

Similar patterns were observed following the 2008 financial crisis. A proliferation of large-scale land grabs – often allowing monoculture plantations to replace diverse agroecosystems – displaced forest communities and caused social and environmental destruction (FAO, 2020c). While the impacts of these infringements on global deforestation rates is unclear, and where they are at their highest more likely are part of a broader political environment (Kaimowitz and Wunder, 2021; Wunder *et al.* 2021), the localised environmental destruction and social injustice implications are likely to be significant.

6. Resilience: responding to the immediate impacts of COVID-19 crisis

The impacts of COVID-19 pandemic we have discussed have led to a surge of response efforts in forest communities. These responses are summarised below and were designed, implemented and monitored by a huge variety of stakeholders. Drawing on our case studies and the literature, we focus on how organisations representing forest communities have used their capacity for collective action to reduce and/or mitigate impacts in collaboration with a variety of other stakeholders. In the short term, their focus has often been on addressing social and economic impacts. Environmental actions, which will be key to recovery and building back better, have so far been less prominent and are thus dealt with in Section 7.

6.1 SOCIAL RESPONSES TO COVID-19 CRISIS

6.1.1 Disseminating information

In the absence of effective information from state authorities, local community organisations have successfully set up communication mechanisms to respond to COVID-19 crisis. They have done this by using their networks and locally and culturally appropriate languages and mediums, including pamphlets, radio, social media and farmer field schools (Díaz de León-Martínez *et al.* 2020; ECLAC, 2021; FAO, 2020a, 2020j; Kuhn *et al.* 2020; Sutherlin, 2020; UN DESA, 2020c). For example in Bolivia, more than 400 women in La Paz, Oruro, Potosí and Cochabamba who are members of the Centre for Integral Development of Aymara Women (CDIMA) organised their own information campaigns targeting Indigenous communities (ECLAC 2021).

Ensuring communication channels are working effectively with accurate and accessible information increases safe COVID-19 practices. A survey of income-poor rural and urban households in Indonesia indicated that individuals with better knowledge of modes of COVID-19 transmission were likely to take more preventative measures (Lau *et al.* 2020). Perhaps most importantly, effective information sharing is critical to establishing trust and accountability between remote forest areas and state actors in charge of COVID-19 monitoring and response. Trust and accountability increase the likelihood that health advice is followed and underpin collaborative actions needed for medium and long-term recovery (Ataguba and Ataguba, 2020; FAO, 2020l; WHO, 2020).

6.1.2 Local social protection responses

Social protection measures have played a key role in responding to COVID-19 impacts. Despite the presence of many national-level efforts, localised initiatives by forest community organisations and devolved state agencies have stood out for their proven ability to, comparatively quickly, identify and reach the most vulnerable during the pandemic (Adhikari *et al.* 2021; Vikalp Sangam and CFR-LA, 2020). Drawing on experiences from the role of CFUGs in the 2015 earthquake and COVID-19 crisis in Nepal, Gentle *et al.* (2020) suggest that such local social protection schemes are often successful where they have well-established policies, governance systems and mechanisms of delivery, are familiar with and embedded in local contexts, and can properly target the most vulnerable groups due to the availability of disaggregated data. Specific examples of social protection seen in forest communities in response to COVID-19 crisis include the provision of food aid and the role of informal financial institutions (see the following sections).

Providing food aid

Both governments and local organisations representing forest and farm producers have purchased surplus produce from farmers. This has been to both maintain household incomes and also to distribute food for free, tackling issues of market and food access (Adhikari *et al.* 2021). Individuals who were unable to obtain food have benefited from basic food parcels organised by forest and farm producer organisations, either on their own or in collaboration with state actors (as seen in the AFIN, FECOFUN and UNORCAC case studies). In India, several *gram sabhas* (village assemblies) identified vulnerable households such as *govaliyas* (shepherds) and widows with small children who were dependent on their own labour and collecting forest products to meet subsistence and income needs (both of which were heavily disrupted by COVID-19 pandemic). In the short term, these vulnerable groups were provided with grain from more prosperous households within the community. For the medium term, they were connected to external social protection systems, which provided three months of rations (Vikalp Sangam and CFR-LA, 2020).

These collective actions have provided households with short-term relief. But how food aid is distributed within households also requires attention. For example, GhaFFaP found that women's food security was particularly vulnerable. As family members returned home and there were more mouths to feed, women adopted negative coping strategies such as missing meals and reducing portion sizes. Such gendered eating norms have the potential to limit the efficacy of social protection efforts to maintain food security.

Local financial institutions

Local financial institutions have provided a key safety net for vulnerable households. VSLAs that provide favourable interest rates and rely on social networks have proven more flexible to COVID-19 shocks than national insurance schemes and have helped to mitigate COVID-19 impacts on income (Kansiime *et al.* 2021). In Ecuador, UNORCAC

considered that informal community banks and women's savings groups were key to responding to household credit needs, while UNORCAC's own credit service (which is subject to government regulations) struggled to provide. In Ghana, locally managed VSLAs, which are a key part of the Tele-Bere producer organisation, managed to quickly distribute funds to communities and informal enterprises. This VSLA service was particularly important as these groups were unable to access government grants as they were not formally registered enterprises. Similarly, RECOFTC (2021) estimated that savings generated from the sales of forest products had supported more than 3 million community forest members in the Lower Mekong Region to cope during the lockdowns.[4]

Cash transfer programmes

Several direct and indirect sources of financial support were provided to individuals to address economic impacts of COVID-19 crisis (Salazar *et al.* 2020). One popular method used by governments and locally accountable organisations has been cash transfers. The pandemic often disrupted the delivery mechanisms used by national programmes, especially in rural areas (Vargas *et al.* 2021). In some instances, it then fell to community-accountable organisations to administer cash transfers in remote forest areas. One example is the Amazon Emergency Fund[5] which is working with the Coordinating Body of Indigenous Peoples of the Amazon Basin (Coordinadora de las Organizaciones Indígenas de la Cuenca Amazónica or COICA) and its nine national Indigenous people's organisations, as well as partners and allies across the Amazon and around the world. The fund provides rapid-response grants for urgent needs of forest communities such as COVID-19 prevention and care, food and medical supplies, and emergency communications and evacuation (Sutherlin, 2020).

6.1.3 State-led social protection responses – public work schemes

Governments also often used public works schemes and emergency employment measures to alleviate economic stress (FAO, 2020a, 2020b; Saeed Khan, 2020; UN DESA, 2020a). In forest areas, employment schemes often centred around tree-planting programmes, such as in Pakistan, where people who had lost income due to COVID-19 crisis were hired to contribute to the country's 10 Billion Tree Tsunami programme (Saeed Khan, 2020). However, though attractive from both an employment and a restoration perspective, one major concern to avoid common pitfalls of planting schemes is ensuring the right trees are planted in the right places (Fleischman *et al.* 2020). In this regard, implementing schemes through locally accountable organisations has often been effective (Mayers, 2021).

[4] Here considering Cambodia, Lao PDR, Myanmar, Nepal, Thailand and Vietnam.
[5] See https://amazonemergencyfund.org

6.1.4 Traditional practices revived to motivate collective action and re-organisation

Traditional knowledges and practices have been essential in many forest communities' responses to COVID-19 crisis and have helped protect against COVID-19 shocks. As many have done in the past, to preserve their safety several communities decided to retreat further into their forests (Anderson, 2020; Degawan, 2020) and repurposed traditional practices of restricting movement into and within their villages (Menton *et al.* 2021; UN DESA, 2020c). Many also called on historical norms of reciprocity, which in the past have been used to resist marginalisation, to ensure access to basic provisions not provided by the state or markets during lockdowns (Córdoba *et al.* 2021). This was highlighted in Ecuador, where the Peasant Brigades for Food Sovereignty (PVFS) were mobilised by The National Campesino Movement (FECAOL) to generate grassroot responses centred on values of reciprocity to meet the needs of the urban and rural poor. Immediately after the initial cases of COVID-19, the PVFS worked with partners from civil society and local government to establish food-supply centres in urban hubs and to set up grassroots-led food distribution, based on principles of a fair price and solidarity (Córdoba *et al.* 2021).

COVID-19-related restrictions on movements of goods and people also revived interest in and reliance on traditional environmental and agricultural knowledge (such as harvesting and preparing wild foods) and production systems (such as the Andean *chakra* system practiced by UNORCAC members). Traditional production systems have generally proven to be more resilient to COVID-19 shocks compared to industrial high-input alternatives. They have helped maintain food security in the immediate response to COVID-19 crisis (Alvi *et al.* 2021; Zavaleta-Cortijo *et al.* 2020). Similar findings have been reported by FIFATA, UNORCAC and AFIN in this report and have also been observed with smallholders in China by Ahmed *et al.* (2020).

6.1.5 Advocacy for rights and access to key services

Diverse forms of advocacy and activism for support and justice have been documented globally regarding access to healthcare, maintaining territorial rights and against the abuse of authority as part of COVID-19 mitigation efforts (Fischer-Mackey *et al.* 2020; Pimentel and Ormaza, 2020; Sutherlin, 2020). However, at the same time, national lockdowns and restrictions on mobility have limited the physical and political space for forest communities to advocate and lobby government authorities (Cotula, 2021).

Despite these challenges, weak responses from the state to contain and mitigate the pandemic have sparked a new wave of activism and resistance amongst Indigenous Peoples' organisations. In Brazil, the Articulation of Indigenous Peoples of Brazil (La Articulación de los Pueblos Indígenas de Brasil or APIB) brought the state to the Federal Supreme Court because of its perceived deliberate inaction to protect highly vulnerable Indigenous Peoples' communities (ECLAC, 2021). At the same time, Indigenous Peoples' rights organisations and their allies in the Senate were able to approve a bill for an emergency plan to combat coronavirus for Indigenous Peoples, Quilombolas

and traditional populations (PL 1142) (Menton *et al.* 2021). Both were hard-won cases happening alongside ongoing struggles against a series of political actions aimed to weaken territorial protection and state support for Indigenous rights in the country.

Another example is seen in Ecuador, where the Waorani Indigenous Peoples won a court case against the Ecuadorian government. The Waorani victory was achieved with the support of allies in civil society and academia. It mandates the Ecuadorian government to institute minimum precautionary measures in conjunction with the Waorani to protect them against the impacts of COVID-19 crisis (Amazon Frontlines, 2020).

Elsewhere, Indigenous Peoples and community forest organisations have managed to continue their lobbying for rights and link this to post-COVID recovery and associated resources. For example in Bolivia, AFIN worked with the government to finalise a national legal standard for financing forestry enterprises. Once implementation starts, it will benefit 10,000 Indigenous and smallholder farmer families collectively managing 5 million hectares of forests. To support these efforts, AFIN is negotiating a USD 20 million support package with the government as part of the national COVID-19 recovery initiatives. In Nepal, FECOFUN has worked with local and federal governments to identify community forestry enterprises in areas that could help absorb the many migrants returning from abroad and who need work. Together with 11 local government authorities, they developed COVID-19 response action plans that focus on generating public investment for and employment within community forestry enterprises.

6.1.6 Localised healthcare supported by state actors

Well-developed healthcare services are often unavailable to forest communities. However, there are cases where local organisations and governments have been able to provide essential healthcare facilities and services in response to immediate needs during COVID-19 pandemic. In Peru, the Shawi Indigenous people increased access to healthcare by lobbying governments and training local youths to set up first aid clinics that incorporate traditional and western medicine (Sutherlin 2020). In Nepal, FECOFUN worked with local governments to mobilise 1,400 CFUGs to offer their office buildings and meeting halls for COVID-19 quarantining (see also Gentle *et al.* 2020). In India, frontline health workers in rural communities were responsible for contact tracing potential infectious cases, monitoring those in isolation and paying special attention to the vulnerable (Dutta and Fischer, 2021). In addition to working with states, many Indigenous Peoples and local communities have promoted traditional medicine and therapeutic remedies in their efforts to ensure community healthcare (Walters *et al.* 2021). This has been particularly prominent in Latin America (ECLAC, 2021).

6.2 ECONOMIC RESPONSES TO COVID-19 CRISIS

Market access challenges have boosted innovation and created new opportunities. Several forest and farm producer organisations reported pursuing novel marketing channels such as online sales as a strategy to overcome the challenge of market closures (Forest and Farm Facility, 2020a). Such online responses were especially prominent among youths (FAO, 2020l and 2020g).

Equally prominent have been the establishment of home delivery services. For most, this was a completely new way of operating using a mix of offline and online communication channels such as social media and simple phone orders. For example, the Association of Ecological Producers of Bolivia (Asociación de Organizaciones de Productores Ecológicos de Bolivia or AOEPEB) created a new initiative – Biobags: Organic Production from the Garden to the Door – delivering fresh fruit and vegetable bags directly to their consumers (Forest and Farm Facility, 2020a). Similar approaches were undertaken by UNORCAC and by several other organisations of forest and farm producers supported by the Forest and Farm Facility (see Box 2). These organisations were able to organise to ensure full adherence with biosecurity protocol standards to minimise transmissions.

Handwashing and mask-wearing before a forest producers meeting in Kalunda Kisununu (Democratic Republic of the Congo), John Katanga, FAO

Other responses to ensure market access during the crisis included product diversification and value addition. For instance, in Indonesia, cocoa cooperatives launched longer shelf-life cocoa nibs to allow for greater uncertainties in storage and transport times (The Rainforest Alliance, 2020). Despite many markets returning to standard operation, the presence of these new innovations is likely to significantly aide any reorganisation efforts needed to respond to future market access challenges.

These are examples of immense efforts to reorganise complex day-to-day operations in a highly uncertain environment. Within this context, national and local government agencies also have played an important part. In different locations, state actors have set up public procurement systems with minimum support prices (Ceballos *et al.* 2020), designated agricultural workers as 'essential', meaning they could continue to operate (FAO, 2020k; Nchanji *et al.* 2021) and provided 'agricultural ambulances' to transfer farmers' goods to market (Adhikari *et al.* 2021). Unsurprisingly, locally governed and thus more agile markets have been easier for both local organisations and state actors to reorganise than national and international markets. They have therefore proven a more resilient source of food and income (van der Ploeg, 2020).

7. Seven pathways to recovery and building back better

Short-term COVID-19 responses continue to be vitally important. But in many places, people are increasingly focused on recovery and building back better. Immediate urgent actions that address the short-term impacts of the pandemic need to be distinguished from medium to long-term efforts to build back better. Organisations of community forest users recognise this need. For example, FECOFUN have dealt with the initial urgency of the pandemic and are now focusing on how they can engage with green recovery-related agendas:

> *In amidst of the Covid-19, community forest helps the worst-hit community by providing food relief [and] material and hygiene products. These are the quick relief materials distributed in the pandemic. Now there need to be incomes and jobs in the community, which we can create through the community forest. Let us step ahead in the green economy with the collaboration of government, public and partnership approach.*
>
> Bharati Pathak, Chairperson, FECOFUN (2021)

This section considers the impacts and responses to COVID-19 crisis seen in forest communities and their organisations. We highlight seven key action areas that government agencies involved in COVID-19 response and recovery planning, including as part of other national sustainable development agendas, can take for recovery and building back better. Once again, owing to their potential contributions, we focus on locally accountable organisations and the role they can play in this endeavour. Although some of these actions may be or already have been initiated by such organisations, many of these require state-led initiation of policy and investment. As recovery efforts set the conditions for subsequent efforts to build back better, medium and long-term pathways to resilience are presented together here.

7.1 STRENGTHEN REPRESENTATIVE ORGANISATIONS OF FOREST COMMUNITIES

As illustrated throughout this report, locally accountable organisations representing people in forest landscapes can effectively challenge marginalisation. They do this through their capacity to lobby for improved rights recognition and access to healthcare, infrastructure, social protection, markets and finance. These efforts are typically more

effective when such organisations are encouraged and have the necessary capacity to participate in policy processes at multiple levels of governance.

FECOFUN, GhaFFaP, AFIN and FIFATA all provide a case in point. These organisations have engaged policy actors to influence recovery efforts. Strengthening these organisations to help build their collective capacities to engage with policy is an effective way to tackle the kind of vulnerabilities that have underpinned the impacts of and undermined responses to COVID-19 crisis. The Forest and Farm Facility and the International Land and Forest Tenure Facility provide unique examples of global programmes doing exactly this. The Forest and Farm Facility channels nearly 60 percent of its funding directly to forest and farm producer organisations. This funding helps strengthen their members' collective capabilities to engage in policy and markets and have generated significant gains in policy recognition, and climate and economic resilience.[6] A similar approach is taken by the International Land and Forest Tenure Facility. It also channels direct funding to support Indigenous, tribal and local communities to secure and defend their tenure rights.

7.2 INVOLVE LOCALLY ACCOUNTABLE ORGANISATIONS IN RECOVERY DESIGN

As demonstrated throughout this report, when local forest community organisations are supported, they can use their social capital to make invaluable contributions to the design and implementation of recovery efforts. Their knowledge of context-specific local needs makes them well placed to anticipate, monitor and mobilise responses. They are embedded within local areas and networks, which makes them easier for people to reach and creates personal incentives for action. They often have legitimacy and trustworthiness (Dutta and Fischer, 2021). And such organisations and their needs are well aligned with methods of co-designing and co-producing knowledge and policy (Covey *et al.*, 2021). These factors are particularly pertinent in more remote and fragile forest governance contexts, where large gaps often exist between the realities of the local people and the highly bureaucratic nature of national and international institutions (Dutta and Fischer, 2021).

But realising these benefits in design requires multi-scalar governance. Locally accountable organisations must interact with other stakeholders at multiple levels. Such

[6] During its first phase in 2012–2017, this approach resulted in 33 changes in policies, rules or regulations in favour of forest and farm producers' interests, reducing their political marginalisation (FAO 2018). Similar results continue to be generated in Phase II which started in 2018 (Forest and Farm Facility, 2021).

systems require long-term investment in democratic structures. This has been seen, for example, in the devolution of development resources in India through long-term political transformation. This has facilitated more inclusive participation in local decision-making and has supported an effective initial response to the first wave of COVID-19 pandemic (Fischer, 2021). Additionally, in Nepal, FECOFUN's long history of social and political mobilisation allowed it to react to changes in Nepal's federal governance system. This more devolved governance system allowed FECOFUN a more integrated role during the COVID-19 response compared to other major crises such as the 2015 earthquake (Gentle *et al.* 2020). In contrast, where organisations representing forest and farm producers have not led or been involved in recovery efforts, their constituents have often been excluded from accessing benefits. For example, GhaFFaP's members were not consulted on or considered in the government of Ghana's design of fiscal relief measures targeting small businesses. Consequently, these measures proved to be inaccessible to the many producer enterprises. Without formal registration, they struggled to comply with eligibility criteria.

Several organisations of forest and farm producers have looked to become increasingly embedded in COVID-19 recovery efforts by engaging in multi-stakeholder platforms. The organisations that contributed case studies to this paper all engage in various forms of multi-stakeholder dialogue to advance the interests of their members. For example, GhaFFaP organises national-level policy dialogues, which bring together multiple state, private-sector and development agency actors to ensure post-COVID-19 actions prioritise their members' needs. FECOFUN used policy dialogues to unlock finance for CFUGs, while AFIN engaged in economic recovery support for their members' enterprises. Finally, UNORCAC's participation in the Cantonal Emergency Operational Committee has been critical in allowing them to represent their communities' voices in local and provincial decision-making during the pandemic.

There is one delicate but necessary balance within stakeholder engagement processes to be made. Organisations such as GhaFFaP, FECOFUN, AFIN and UNORCAC must engage with governments and other powerful stakeholders as actors to partner with. But they are also actors to be challenged and criticised when required (Fischer-Mackey *et al.* 2020; Fox, 2016). All the case studies presented in Section 4 include a combination of cooperating with and challenging external actors to do better and adequately consider forest communities in designing and implementing all initiatives.

7.3 CREATE ENABLING POLICY FOR PRODUCERS TO DIVERSIFY AND BUILD RESILIENCE AT MULTIPLE LEVELS

The pandemic has highlighted the importance of drawing on diversified income, production and market systems to respond to risk and shocks. Pursuing diversification is already an important risk-mitigation strategy among smallholder forest and farming communities. But the pandemic has made this even more urgent. Many forest and farm producers, through the support of their producer organisations, have already started pursuing greater diversification as part of COVID-19 coping strategies.

For instance, coffee producers in Peru have begun to integrate more food crops for personal consumption on their lands, as a result of what they learnt from the COVID-19 disruptions (Vargas *et al.* 2021). This will help them produce more subsistence foods and generate surplus food for sale in local markets and depend less on coffee markets, which proved vulnerable to COVID-19 impacts (Vargas *et al.* 2021). Similarly, AFIN is diversifying its activities by focusing more on agroforestry, NTFP value chains and family farming. This will give their members greater food security and more jobs, beyond their existing community forestry business. Several other examples of farmers pivoting from large areas devoted to cash crops such as cotton, cashew and cocoa, towards a broader array of products during the COVID-19 pandemic have been reported the world over (CIRAD, 2020; FAO, 2020d; Forest and Farm Facility, 2020a; Pimentel and Ormaza, 2020; The Rainforest Alliance, 2020). Producer organisations can often be central in this transition by raising awareness about diversification practices as well as the benefits of implementing them. For example, organisations such as FIFATA and GhaFFaP have invested heavily in agroecological capacity building for their members. In their case, as in many other parts of the world, agroecology is both a movement and set of practices, as it encourages diversification within production systems and markets. It is also a strategy to reduce household dependence and expenditure on external inputs, build resilience against climate change and stabilise household income and food security (Altieri and Nicholls, 2020; Gliessman, 2020; Jumba *et al.* 2020).

In addition to work by local organisations, diversification can also be encouraged by policy (Macqueen, 2021). For example in Vietnam, greater awareness of health concerns during the pandemic has led commune-level people's committees in three provinces to support the certification of integrated organic forest and farm production systems. In 2020, they passed a new provincial Resolution (69/2020-HDND), which provides support for 100 percent of certification audit costs and 70 percent of seedling costs. They also established new participatory guarantee scheme (PGS) boards to provide low-cost and more participatory certification (Forest and Farm Facility, 2021). These new policies were the result of advocacy by the Vietnamese National Farmers Union. They also encourage farmers to keep long-rotation timber on their plots by providing financial subsidies of USD 430 per hectare. All in all, these measures contribute to a favourable environment for smallholder forest and farm producers to diversify.

But despite the clear benefits, diversification is not easy or possible for everyone. Many of the most vulnerable individuals in forest communities lack the social, economic, human or physical capital needed to engage in such opportunities. And for many living below the poverty line, such as informal workers, diversification is often a remote potentiality (Béné, 2020). Therefore, it remains important to strengthen the range of community- and state-led social protection initiatives that were essential in responding to COVID-19 impacts.

7.4 SCALE UP AND FORMALISE COMMUNITY-BASED SOCIAL PROTECTION INITIATIVES

Locally run social protection initiatives were key to responding to COVID-19 crisis. These initiatives can contribute to wider improvements in social and economic security that are key to recovery and building back better, and reducing the impacts of future shocks. But, particularly in low-income countries, there are often budgetary and capacity limitations on national-level social protection schemes. Therefore, expansion is likely to require a patchwork of locally specific solutions that builds on existing programmes and lessons learnt from COVID-19 pandemic (Gerard *et al.* 2020).

When combined with disaster risk reduction and climate-change adaptation in an integrated approach, such social protection systems can promote long-term interventions for climate and disaster-resilient livelihoods in forest communities (Davies *et al.* 2013). Local institutions can use their existing knowledge of and embeddedness in local contexts to contribute to these integrated efforts. For example, AFIN's ideas on joint risk-assessment activities with government agencies from a variety of sectors for recovery would make invaluable contributions to adaptive social protection planning and implementation. Integrating locally led social protection systems may be easier if they are consolidated and formalised, which would also make it easier for them to attract public and private-sector collaboration. For example, GhaFFaP's drive to formalise the VSLAs into credit unions could help boost access to not just social finance but also other forms of financial services, providing a key economic safety net for future shocks. Such formalisation will also help to attract partnerships and support from more-formal financial institutions. Despite the benefits of such consolidation and formalisation, this must be weighed against the benefits of informality and flexibility, which often allow local social protection to be more agile in response to dynamic and unexpected COVID-19 needs.

Further efforts to improve social protection for forest and farm producers can be achieved when producer organisations engage business partners from their value chains. Measures could include improving health standards along value chains. This could create additional opportunities for decent employment and increase the provision of educational programmes for their workers (FAO, 2020a). A short-term example of this was seen in Ecuador. The Wiñak Association was badly hit by the pandemic when 90 percent of the 900 families who they work with contracted COVID-19. As they could not access testing facilities from the government authorities, the association had to organise this themselves. Through one of their business partners, they managed to secure funds to invest in rapid tests and protective equipment. Without these measures, Wiñak could not have continued operating and would have experienced additional health and economic impacts. This highlights the types of opportunities to leverage social protection assistance that may be available to organised forest and farm producers.

7.5 PREPARE FOR AND RESPOND TO SHOCKS WITH BETTER DATA

How can we be better prepared for future pandemics like COVID-19? This question has been raised in several of the case studies in Section 4. Having better systems for collecting and disseminating disaggregated data is not only important for COVID-19 response and recovery. It is also important in ensuring representative organisations are better prepared for and able to mobilise political and financial support once the crisis is upon them.

For AFIN, improving their existing risk-management strategy became an important point of reflection. They realised it would require involving other sectors such as health and natural hazards, which would help better understand and mitigate some of the challenges that were not covered sufficiently in their existing risk assessments. Although difficult at first, the pandemic did help initiate new partnerships such as that with the Ministry of Health. For forest and farm producers and their organisations, new collaborations such as these could become part of longer-term partnership to improve preparedness and resilience to other shocks and risks, such as forest fires, water scarcity or flooding.

Another good example is the extensive survey conducted and analysed by GhaFFaP. This covered the effects of both the extreme flooding experienced in northern Ghana and the COVID-19 pandemic, which were affecting their members simultaneously. The type of data GhaFFaP collected focuses not just on vulnerabilities and impacts, but also on achievements. Highlighting achievements was an essential part of GhaFFaP's strategy to mobilise political and financial recognition and support for COVID-19 recovery activities.

GhaFFaP was able to collect this important survey data thanks to financial support from the Forest and Farm Facility. But many local communities face challenges. Often, locally accountable organisations lack the necessary financial and human capacity to collect data at the scale needed to create policy impact. For instance, FECOFUN is a large and highly resourceful organisation that proved instrumental in ensuring effective communication between central, local and grassroots levels. However, its large size and dispersed membership also presented a great challenge in collecting and aggregating the data needed to inform COVID-19 response and recovery. Another major challenge was the dynamic nature of the pandemic and its influence on the movement of people, which was also highly dependent on the evolving changes in nearby India and the Middle East. There were rapid changes in the numbers of people moving back to their villages and then just as quickly leaving again. This created problems in estimating what resources were needed, in what quantities and for whom.

These challenges are not unique to FECOFUN. They have been experienced by a wide variety of forest community organisations. Disaggregated data will be key to targeting recovery and reorganising to build back better. This means that locally accountable organisations who have access to vulnerable groups must be supported to collect data. Collaborations between organisations such as AFIN, FECOFUN and GhaFFaP and government or research actors would be beneficial.

7.6 SUPPORT BROADER RURAL ECONOMIC TRANSFORMATIONS

The COVID-19 pandemic has generated unexpected shocks to value chains at both national and international levels. In many ways, organisations representing forest and farm producers stepped in to help reorganise distribution channels to shorten and diversify chains. UNORCAC's response efforts to reorganise their trade fairs to fit the changing needs of their members under the evolving COVID-19 situation highlights the value of the improved adaptability of diverse local supply chains and markets.

Many of these initial changes were temporary measures to help adjust to the situation. But as the pandemic continues to unfold, other value chain actors are also adapting. In Zimbabwe, the pandemic is inducing broader transformations in the rural economy. Scoones (2021) reports how the shortening of value chains has led to a new focus on local economic activity. Before the pandemic, large tobacco agribusiness used to concentrate their trading in the larger cities. However, as the movement of goods and people have put constraints on their business, they have now invested in new trading floors closer to producers in rural areas. Increased economic activity has also led to an influx of new financial service providers. The number of banks serving forest and farm producers has doubled compared to pre-COVID figures. The same applies to input providers of seedlings. New local suppliers are quickly gaining market traction and replacing mainstream suppliers. This reorientation towards rural economies is happening organically as businesses adjust and adapt to COVID-19 effects. Understanding the enabling factors and barriers behind these movements could greatly help in designing economic recovery programmes and policy.

Organisations such as forest and farm producer organisations can be active in capitalising on such reorientations. They can help create additional spaces and voice for local producers in local and global markets. However, to achieve meaningful results, community-led action from the ground must be coupled with active engagement by the state. States can support the efforts of local organisations with fiscal policies that protect and incentivise small-scale production and provide the resources, rights and opportunities for them to flourish. For example, in Bolivia, Indigenous forestry enterprises have suffered from an influx of cheap imported timber. The government is now under pressure from organisations such as AFIN, which is advocating for forest-incentive packages and policies to promote the revival of local enterprises.

7.7 SUPPORT LOCAL LEADERSHIP IN FOREST LANDSCAPE RESTORATION AND PROTECTION

Forests were highlighted as providing vital safety nets for communities during COVID-19 pandemic. At the same time, their degradation is closely linked to the emergence of zoonotic disease (Bloomfield *et al.* 2020; di Marco *et al.* 2020; FAO et al. 2020). In line with the need to act on other urgent global crises such as biodiversity loss and climate change, various approaches to forest restoration and conservation are increasingly being recognised as important for preventing and limiting future pandemics. This was

highlighted in 2020, when the Collaborative Partnership on Forests[7] advocated for the integration of conservation, restoration and sustainable management of all types of forests and trees outside of forests (such as on farms) into COVID-19 recovery measures (Collaborative Partnership on Forests 2020). Similar recommendations have been made by the Worldwide Fund for Nature (WWF) to deliver a green and just recovery from COVID-19 crisis in Africa (WWF 2021) and by FAO and its partners involved in the implementation of the Sustainable Wildlife Management Programme (FAO et al. 2020). And more evidence has been consolidated on the crucial importance of making local people primary partners in such agendas (see Erbeaugh *et al.* 2020; FAO and FILAC 2021; Hatcher *et al.* 2021; Rights and Resources Initiatives 2020). However, those same studies – alongside examples presented in this paper – also highlight the many challenges that remain. Major advances are still needed to ensure these communities have their rights to their territories, self-determination and to healthy forest resources recognised and enforced in law.

GhaFFaP members from the Tele-Bere producer's association conducting nursery work as part of early stage preparations for FMNR pre-pandemic. Photo ©Tele-Bere

As we have highlighted throughout, much of the social organisation that has been observed as being a pillar of strength in the COVID-19 response stems from activities developed around these collective rights. However, depending on the geographic and political context this is likely to look very differently. For example, in northern Ghana, Tele-Bere (a member of GhaFFaP) is practicing farmer-managed natural regeneration (FMNR) through existing VSLAs and other local institutions such as chieftaincies and district assemblies. They work together with the common aim to generate benefits for nutrient cycling, fire management and improve growing conditions for local farmers' crops. These benefits are expected to be of continued relevance as smallholders look to

[7] The Collaborative Partnership on Forests is an innovative voluntary interagency partnership established in 2001 to support the UN Forum on Forests and its member countries.

recover from the economic impacts of COVID-19 crisis and concurrently address their ongoing vulnerability to climate change. In the Bolivian lowlands, AFIN face a challenge in that much of their members' territories affected by the forest fires is simultaneously under immense pressure to be converted into agricultural land by the state and other external actors, big and small. Similar challenges were also highlighted by FIFATA in Madagascar who face a constant uphill battle in advocating for their members' land rights. Scaling up locally led FMNR or community-forest management and protection would help increase their contribution to recovery at the landscape scale, but organisation and tenure rights are key. Progress can be made effectively through Indigenous forest and farm producer organisations. However, political support is needed. Synergies can also be created with several flagship policy interventions, including the African Forest Landscape Restoration Initiative (AFR100), the UN Decade on Ecosystem Restoration and the UN Decade of Family Farming to provide direct support to diverse and regenerative forest and farm production systems.

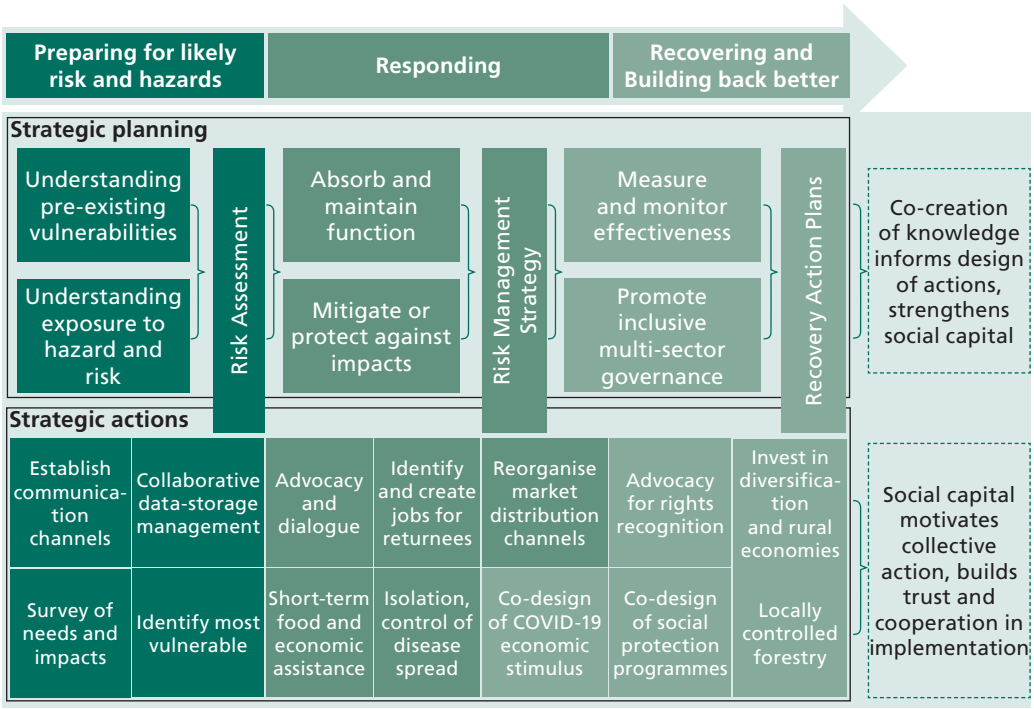
8. Conclusion and recommendations

Forest communities continue to experience significant and multi-sectoral impacts of the ongoing COVID-19 pandemic. We have shown how these impacts are shaped by pre-existing vulnerabilities that stem from the structural inequalities experienced by forest communities and specifically by the most vulnerable groups within them (women, youth, Indigenous Peoples). While the influence of these underlying circumstances is almost self-evident, we have sought to focus on how and what makes communities resilient and able to respond to crises.

We have repeatedly highlighted the value of social capital and the capacity for collective action. During times of uncertainty and crisis such as those arising from COVID-19 pandemic, it is these social values and relationships that have provided the trust and legitimacy needed to ensure effective responses. However, despite substantial organising efforts, negative impacts have not been eliminated. And many will be felt for a long time. Consequently, there must be a continued emphasis in the medium and long-term on addressing the vulnerabilities that have shaped COVID-19 impacts. This will require actions from actors both inside and outside forest communities.

In the previous section, we provided seven pathways to recovering and building back better that have emerged from our analysis. In Figure 1, repeated here from the summary, we summarise these into a framework to give strategic direction for how organisations of Indigenous Peoples and forest and farm producers can be better prepared for, recover from and be more resilient to ongoing and future pandemics. This framework draws directly on experiences and strategies from the ongoing COVID-19 pandemic, but is also of relevance to other risks and shocks.

Figure 1 Strategic direction for strengthening preparedness and resilience to future COVID-19 shocks


Preparing for likely risk and hazards
Responding
Recovering and Building back better
Strategic planning
Understanding pre-existing vulnerabilities
Understanding exposure to hazard and risk
Risk Assessment
Absorb and maintain function
Mitigate or protect against impacts
Risk Management Strategy
Measure and monitor effectiveness
Promote inclusive multi-sector governance
Recovery Action Plans
Co-creation of knowledge informs design of actions, strengthens social capital
Strategic actions
Establish communica-tion channels
Collaborative data-storage management
Advocacy and dialogue
Identify and create jobs for returnees
Reorganise market distribution channels
Advocacy for rights recognition
Invest in diversifica-tion and rural economies
Survey of needs and impacts
Identify most vulnerable
Short-term food and economic assistance
Isolation, control of disease spread
Co-design of COVID-19 economic stimulus
Co-design of social protection programmes
Locally controlled forestry
Social capital motivates collective action, builds trust and cooperation in implementation

8.1 ACTIONS THAT HELP PREPARE AND PROVIDE STRATEGIC PLANNING

Within this framework, there are key preparatory actions for these organisations to take, where possible, in collaboration with external actors such as government agencies engaged in COVID-19 response and related sectors, as well as value chain actors, academics and NGOs. Although the pandemic has given rise to new forms of confrontations and grievances, it has also helped create new partnerships to mitigate negative impacts. Rarely can one organisation control or manage it all alone and collaboration is just as critical now as it was before the COVID-19 pandemic arrived.

The framework in Figure 1 provides a structured process that is also useful for reflecting on and making adjustments based on the lessons from both current and past crises. Through a gradual process (moving from left to right in the figure), the steps involved help to increase understanding of:

- Who and/or what is likely to have the greatest exposure
- Where, when and how severe impacts are likely to be (the risk assessment)
- Which risks can be mitigated or protected against and which cannot (the risk management strategy), and finally

- How a risk-management processes can be used to monitor, communicate and engage various stakeholders so that people, forests and enterprises can recover in the medium to long-term.

These are well-established steps within risk-management practices which have been built based on experiences with various natural hazards (see Bolin and Macqueen 2016; Bolin *et al.* 2016 and Macqueen, 2021). In the next sections, we will look at what these different actions may involve, as seen from the case studies and literature reviewed.

8.2 ACTIONS TO PROVIDE STRATEGIC DIRECTION

Figure 1 highlights 14 strategic actions. These are drawn directly from the responses and findings for recovery and building back better outlined in Sections 6 and 7. However, these strategic actions will require significant collaboration to deliver the type of reorganisation needed of socio-economic systems that interact with forests. The following recommendations outline how these actions can be achieved.

8.2.1 Share and support communication channels and information management

Effective communication channels must be established between grassroots organisations and with local and national government levels. But this needs to happen quickly. Government agencies and organisations representing Indigenous Peoples and forest and farm producers already have access to a variety of communication channels such as radio, social media and mobile phone text messaging (SMS). Existing digital service and communication channels used to provide information on markets (such as price information systems), weather (such as rainfall or extreme events), or public health (such as tele-medicine) to ensure that people in remote places can share and receive information.

Systems are also needed for collecting specific impacts and needs in a disaggregated manner, for example though surveys. This can help provide a better understanding of how impacts are experienced differently and to ensure the most vulnerable are identified and can access support from response efforts. Federations of Indigenous Peoples and forest and farm producers can collaborate with government agencies to collect, store and manage data in a collaborative manner to ensure all actors involved in COVID-19 responses have the same access to information.

8.2.2 Develop responses and support based on identified needs

Systems for collecting and disseminating information are the first step. But the information still needs to reach its relevant audiences. Organisations representing Indigenous Peoples and forest and farm producers have effectively used their existing engagement platforms for policy advocacy throughout the pandemic to mobilise material and financial resources and even appropriate healthcare services. They have also successfully used the same platforms to communicate what type and scale of employment needs there are within communities as family members/migrant workers and youth return to their villages

during lockdowns. Consequently, COVID-19 response committees should ensure these platforms are activated early on and then become part of an ongoing dialogue with relevant line ministries in charge of forestry, social protection and rural economic development. Within this same context, government agencies should also support any desires and rights to self-determination such as the many self-imposed self-isolation and access control measures adopted by vulnerable Indigenous communities during the pandemic.

8.2.3 Reorganise socioeconomic systems to support building back better

From a medium to long-term perspective, a process for joint reflection between forest community actors and relevant government stakeholders needs to be introduced. This will encourage learning and adaptation. The structural inequalities and marginalisation made visible during the pandemic require collaborative efforts to design economic stimulus packages, social protection programmes and rights to decide over and exclude external actors seeking to encroach and convert forest areas for other land uses.

It will also require policy incentives to support forest and farm producers and other actors in the value chains where they participate, in making the diversification and investments necessary to transform rural economies. These include fiscal policies to encourage local investments in diversified production systems, processing and trade – and for financial and other input service providers to set up their operations in rural areas. The Vietnam example highlighted in Section 7 provide an interesting case of a highly informed government package of incentives directly targeting the needs of local forest and farm producers. In some countries, rural transformation is happening organically without specific policy incentives, as in the example from Zimbabwe. Understanding how to best ensure these changes remain in place and continue to grow and benefit rural economies will be key. This can be a role for academic institutions in partnership with forest and farm producer organisations, businesses and government actors.

8.2.4 Strengthen representative organisations and involve them in building back better

Finally, if there is one striking feature from the main findings of this paper, it is the role that social capital has had in ensuring trust and effective responses to the effects of the pandemic. These underlying foundations clearly helped motivate collective actions and cooperation during response efforts. Therefore, direct investment is needed from government agencies and donor programmes to strengthen representative organisations and involving them in the design of recovery and building back efforts should be a guiding principle throughout any of the actions identified above.

Much has been learnt already. These organisations need space and support to build upon the efforts they have already made during the COVID-19 crisis. This should be a priority for government and donor programmes. Do not fund them to act as extension agents of the state. Instead, work with them as autonomous partners during this critical juncture to rebuild, reconnect and pursue their locally embedded visions of prosperity.

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Annex 1. Notes on the methodology

The evidence from this working paper is drawn from an extensive review of literature from a range of sources including reports by third-sector organisations and peer-reviewed work from academic journals. Evidence from the literature is complimented by five case studies, which have been co-authored with members of locally accountable forest community organisations from five countries.

Literature review

The initial literature review aimed to establish the impacts that COVID-19 had on forest communities, using key search terms such as 'forest', 'forest community', 'forest dependent community', 'Indigenous people', 'Indigenous communities' and 'rural communities' matched with a combination of 'COVID-19', 'impacts', 'resilience', 'response' and 'building back better'. Once initial information on the types of impacts being experienced had been gathered, more specific searches on key issues such as access to markets, rural health systems, governance issues and environmental degradation were undertaken. These key issues provided the grounds for further research on pre-existing vulnerabilities in forest communities (which exacerbated the collated impacts) and broader writings on resilience and transformations for rural communities that might address structural vulnerabilities.

Case studies

We the authors used our existing networks to conduct case study interviews with forest community organisations who had been actively involved in responding to COVID-19 and are now turning their focus to recovery and building back better.

Each of the five organisations we approached to participate were given the parameters of the working paper and asked if they would be willing to share their experience through a co-authored case study. Organisations that agreed were sent a list of possible discussion points that were drafted by us as the primary researchers based on the findings of the literature review and structure of the working paper. Topics for discussion included the history and pre-COVID-19 situation of the organisation, impacts from COVID-19, immediate responses, and plans and recommendations for recovery and building back better. Each organisation was then invited to participate in an online discussion with us to talk through their experiences, give their responses to the proposed questions and introduce any other COVID-19-related issues that were of significance to their organisations. Following the online conversations and receiving written documentation the organisations had prepared for other purposes, we then drafted case studies to be included in this working paper. The drafts were then shared with the participating organisations, who were asked to add/remove/change any of the content as they saw fit. The final versions agreed upon by all authors are documented in Section 4.

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